





THE  
BOTANICAL EXCHANGE CLUB.

---

LIST OF DESIDERATA

FOR 1877.

---

CLUB REGULATIONS AND LIST OF MEMBERS.

---

---

L O N D O N :  
RANKEN & CO., PRINTERS, DRURY HOUSE,  
ST. MARY-LE-STRAND.

—  
1877.



## REGULATIONS OF THE CLUB.

---

1. The object of the Botanical Exchange Club is to facilitate the exchange of dried specimens of British plants, especially of critical species and varieties. Anyone wishing to become a member will be admitted on payment to the Secretary of an annual subscription of Five Shillings, and on sending a parcel of dried plants in accordance with the subsequent rules. He will then be entitled to share in the distribution of specimens made in the early part of the year following that in which his subscription and parcel were sent.

2. Specimens sent for distribution must be carefully dried; must not exceed in size half-a-sheet of demy (16 by 10 inches); and must illustrate the species they represent as completely as possible. Plants more than sixteen inches long should be once or twice folded, if by so doing the roots can be preserved. (In the *Cyperaceæ*, *Gramina*, and smaller Ferns no specimens should be sent without roots, except in the case of very rare species, which might be in danger of extermination.) No plant must be sent that is not included in the list of desiderata for the current year, unless it be additional to those enumerated in the 7th edition of the "London Catalogue of British Plants," or be from an unrecorded station, or be an unrecorded variety.

3. *Each specimen* must have a label, bearing the number and name of the species as given in the 7th edition of the "London Catalogue"; also the locality and county where, and the date when, the specimen was collected, and the collector's name. The label should be affixed to the specimen by cutting a transverse slit in the base of the label through which the specimen may be pushed. Any facts connected with a species which the sender thinks important and suitable for the "Report" should be communicated on a separate piece of paper,

*written on one side only.* Such piece of paper should be about seven inches wide, and the notes on each species should be dated and signed by the writer. Specimens sent not in accordance with Rules 2 and 3 will be destroyed.

4. Each parcel should be accompanied by a list of the plants the member wishes to receive from the Club. This list is to be made by drawing a short line before their names in the 7th edition of the "London Catalogue."\* Species especially wished for should have a ! before the horizontal line. The name of the member and address to which the return parcel is to be sent, and any special directions as to how the parcel is to be sent, should be written on the outside of the Catalogue. When the same copy of the Catalogue is used at second time the species which are no longer wanted, but which were marked the first time, should have a perpendicular line drawn through the horizontal line. Manuscript lists of desiderata will not be received.

5. Parcels may be sent (*carriage paid*) to any of the following gentlemen not later than the 31st of December;—Dr. Boswell, Balmuto, Kirkcaldy, Fife; Mr. T. R. A. Briggs, 4, Portland Villas, Plymouth; Mr. J. G. Baker, Kew Herbarium; and Mr. Charles Bailey, care of Ralli Brothers, Peter Street, Manchester. Those that arrive after that date will not be available for the distribution for the current year. Members sending more valuable parcels will have their return parcels selected before those who send inferior ones.

6. Members who do not send parcels, but who have been members of the Botanical Exchange Club previous to 1872, and paid their subscription for the current year before December 31st, will share in the annual distribution; but the specimens for such non-contributing members will not be selected until the parcels of all the contributing members have been made up, and they cannot be selected according to lists of desiderata; but *general* instructions, such as the desire to receive plants of particular districts, natural orders, or genera, will be attended to by the distributor. In future no new members will be received by the Botanical Exchange Club except those who contribute specimens of plants.

---

\* Published by Mr. R. Hardwicke, 192, Piccadilly, London, W. (Price 6d., post-free 7d.)

# LIST OF MEMBERS, 1877

---

## Curator.

T. R. ARCHER BRIGGS, F.L.S.,  
4, Portland Villas, Plymouth.

## Secretary.

J. G. BAKER, F.L.S.,  
Kew Herbarium, and 23, Gloucester Road, Kew.

## Local Secretaries.

JOHN T. I. B. BOSWELL, LL.D., F.L.S.,  
Balmuto, Kirkealdy, N.B.

CHARLES BAILEY,  
85, Withington Road, Whalley Range, Manchester.

---

Alcock, R. H. . . . .	Hudcar House, Bury, Lancashire.
Babington, C. C., M.A., F.R.S., F.L.S., F.G.S., Professor of Botany, University of Cam- bridge . . . . .	5, Brookside, Cambridge.
Bagnall, James . . . . .	102, New John Street West, Birmingham.
Bailey, Charles . . . . .	85, Withington Road, Whalley Range, Manchester.
Baillie, E. J. . . . .	7, Crane Street, Chester.
Baker, J. G., F.L.S. . . . .	Kew Herbarium.
Baker, R. L., M.D. . . . .	Barham House, Leamington.
Bennett, A. . . . .	107, Mount Street, Croydon, Surrey.
Bennett, Alfred W., M.A., B.Sc., F.L.S. . . . .	6, Park Village East, Regent's Park, London, N.W.
Benson, Mrs. . . . .	Ringwold Rectory, Dover.
Blow, T. B. . . . .	Welwyn, Herts.



Boswell, John T. I. B., LL.D., F.L.S. . . . .	Balmuto, Kirkcaldy, N.B.
Briggs, T. R. Archer, F.L.S. . .	4, Portland Villas, Plymouth.
Brody, Dr. St. . . . .	Bargate, Richmond, Yorkshire.
Brotherston, Andrew . . . .	Sheddon Park Road, Kelso, N.B.
Brown, R. . . . .	5, Poplar Grove, The Elms, Toxteth Park, Liverpool.
Burton, J. W. . . . .	35, Hemans Street, Toxteth Park, Liverpool.
Crespigny, Eyre de, M.D. . . . .	25, Oxford Road, Kilburn, London, N.W.
Cunnack, James . . . . .	Helston, Cornwall.
Douglas, D. . . . .	13, The Neil Hall, Leith Walk, Edinburgh.
Drummond, Tom . . . . .	Freefield, Clackmannan, Alloa, N.B.
Drummond-Hay, Col. H. M. . . . .	Seggieden, Perth, N.B.
Duthie, J. F., B.A., F.L.S. . . . .	Saharunpore Botanic Garden.
Foggitt, T. J. . . . .	Sowerby, Thirsk, Yorkshire.
Fisher, H. S. . . . .	1, Gladstone Road, Edgehill, Liverpool.
Flower, T. B., F.L.S. . . . .	9, Beaufort Buildings West, Bath.
Fox, Rev. H. E., M.A. . . . .	70, Warwick Square, Pimlico, London, S.W.
Fraser, Dr. J. . . . .	Chapel Ash, Wolverhampton.
Groves, B . . . . .	13, Richmond Terrace, Clapham Road, S.W.
Hanbury, F. J., F.L.S. . . . .	11, Warwick Road, Upper Clapton, E.
Hayward, W. R. . . . .	53, St. Paul's Churchyard, London, E.C.
Hobkirk, C. P. . . . .	Arthur Street, Fitzwilliam Street, Huddersfield.
Horn, G. . . . .	57, Bell Street, Calton, Glasgow.
Howarth, Miss . . . . .	Spring Bank, Burnley, Lancashire.
Hutmaker, E. . . . .	12, Coal Market, Kelso, N.B.



Jones, Miss .. .. .	1, Bryntage Terrace, Upper Bangor, N. Wales.
Lees, F. Arnold, M.B.C.S., F.L.S. .. .. .	Meanwood, Leeds.
Lewis, J. Harbord, F.L.S... ..	180, Mill Street, Liverpool.
Ley, Rev. Augustin, M.A. ..	Sellack Vicarage, Ross, Hereford.
Linton, Rev, E. F., M.A. .. ..	24, Chapman Street, Oldham Road, Manchester.
Linton, Rev. W. R., M.A... ..	75, Devonshire Street, Upper Holloway, London, N.
Lomax, Mrs. E. . . . .	Astewell, Warren Hill, Torquay.
McKay, Richard .. .. .	298, High Street, Glasgow, N.B.
Mason, P. B. .. .. .	Burton-on-Trent.
Melvill, J. C., Jr., B.A., F.L.S.	Kersall Cottage, Prestwich, near Manchester.
Middleton, R. M. .. .. .	Fountain Ho., West Hartlepool.
More, A. G., F.L.S., M.R.I.A.	Royal Dublin Society, Kildare Street, Dublin.
Mott, F. T. .. .. .	1, De Montfort Street, Leicester.
Newbould, Rev. W. W., M.A., F.L.S. .. .. .	118, Albany Street, Regent's Park, London, N.W.
Nicholson, G. .. .. .	Kew Gardens, Surrey.
Payne, Miss .. .. .	2, Westerhall Villas, Weymouth.
Penny, Rev. C. W., M.A., F.L.S.	Wellington College, Wokenham, Berks.
Purchas, Rev. W. H. .. .. .	Alstonfield Vicarage, Ashbourne, Stafford.
Richardson, W. .. .. .	Finkle Street, Alnwick.
Rogers, Rev. W. Moyle .. .. .	Trusham Rectory, Bovey Tracey.
Soutter, J. P. .. .. .	Bishop Auckland.
Stewart, S. A. .. .. .	6, North Street, Belfast.
Stratton, Fred., F.L.S. .. .. .	Newport, Isle of Wight.
Townsend, F., M.A. .. .. .	Honington Hall, Shipston-on-Stour.
Trimen, H., M.B., F.L.S. .. .. .	British Museum, London, W.C.
Tucker, R., M.A. .. .. .	27, Cantlowes Road, Camden Square, N.W.

Varenne, E. G...	.. .. .	Kelvedon, Essex.
Warner, F. I., F.L.S...	.. .. .	20, Hyde Street, Winchester.
Warren, Hon. J. L., M.A...	.. .. .	67, Onslow Square, Brompton, London, S.W.
Waterfall, W. B...	.. .. .	14, Sea View Terrace, Plymouth.
Webb, F. M.	.. .. .	Royal Botanic Gardens, Edin- burgh.
Webster, G...	.. .. .	Holgate Nursery, York.
Whittaker, J.	.. .. .	Morley, Derby.
White, C. F., F.L.S...	.. .. .	42, Windsor Road, Ealing.

## LIST OF DESIDERATA FOR 1877.

---

N.B.—Of any of the species in the following List, specimens varying in number from 10 to 50, according to its degree of rarity, will be acceptable.

- |  |  |
|--|--|
| <p>Thalictrum flexuosum.<br/>             majus, var. a.<br/>             Kochii.<br/>             saxatile.<br/>             riparium.<br/>             Morisonii.<br/>             nigricans.<br/>             angustifolium.</p> <p>Anemone apennina.<br/>             ranunculoides.</p> <p>Adonis autumnalis.</p> <p>Ranunculus Bachii.<br/>             truncatus.<br/>             elongatus.<br/>             radians.<br/>             Godronii.<br/>             marinus.<br/>             salsuginosus.<br/>             ophioglossifolius.<br/>             reptans.<br/>             vulgatus.<br/>             tomophyllus.<br/>             parvulus.<br/>             chærophyllus.</p> <p>Caltha minor.<br/>             radicans.</p> <p>Delphinium Ajacis.<br/>             Consolida.</p> <p>Pæonia corallina.</p> <p>Epimedium alpinum.</p> <p>Nuphar intermedia.<br/>             pumila.</p> <p>Papaver somniferum.</p> <p>Glaucium violaceum.<br/>             phœniceum.</p> <p>Chelidonium laciniatum (<i>sponte</i>).</p> <p>Fumaria Boræi.<br/>             muralis.</p> | <p>Sinapis incana.</p> <p>Brassica Napus.<br/>             Rutabaga.<br/>             sylvestris.<br/>             Briggsii.<br/>             Cheiranthus.</p> <p>Sisymbrium Irio.</p> <p>Matthiola incana.</p> <p>Dentaria bulbifera.</p> <p>Arabis ciliata.<br/>             hispida.<br/>             Turrita.</p> <p>Barbarea arcuata.<br/>             intermedia.</p> <p>Nasturtium siifolium.</p> <p>Armoracia rusticana (fruit).</p> <p>Cochlearia (any abnormal forms).</p> <p>Draba inflata.<br/>             muralis.<br/>             aizoides.</p> <p>Camelina sativa.<br/>             sylvestris.</p> <p>Thlaspi sylvestre.</p> <p>Helianthemum Breweri.<br/>             vineale.<br/>             grandiflorum.</p> <p>Viola permixta.<br/>             sepincola.<br/>             calcareæ.<br/>             arenaria.<br/>             lactea.<br/>             intermedia.<br/>             stagnina.<br/>             Curtisii, vars. a, b, and c.</p> <p>Drosera obovata.</p> <p>Polygala grandiflora.<br/>             oxyptera.<br/>             austriaca.</p> |
|--|--|

- Polygala uliginosa.  
 Frankenia lævis.  
 Dianthus glaucus.  
     Caryophyllus.  
 Lychnis alpina (England).  
 Holosteum umbellatum.  
 Cerastium holosteoides.  
     pentandrum.  
     alpestre.  
     pubescens.  
     nigrescens.  
     Andrewsii.  
 Arenaria Lloydii.  
     norvegica.  
     ciliata.  
 Alsine rubella.  
     hybrida.  
     uliginosa.  
 Sagina alpina.  
     nivalis.  
 Spergularia media.  
 Herniaria glabra (Eastern counties).  
 Scleranthus biennis.  
 Claytonia alsinoides.  
 Elatine Hydropiper (fruit).  
 Hypericum angustifolium.  
     linarifolium.  
     hircinum (*sub-sponte*).  
     elatum (*sub-sponte*).  
 Althæa hirsuta.  
 Lavatera sylvestris.  
 Malva borealis.  
     parviflora, *L.*  
 Tilia grandifolia (*sponte*).  
     parvifolia (fruit).  
 Geranium prostratum.  
     lancastriense (*sponte*).  
     modestum.  
     purpureum.  
 Erodium chærophyllum.  
 Ulex nanus.  
 Sarothamnus prostratus.  
 Lupinus perennis.  
 Ononis repens.  
     reclinata.  
 Anthyllus Dillenii.  
 Medicago apiculata.  
     minima.  
     lappacea.  
 Trifolium suffocatum.  
     Townsendi.  
     filiforme (Scotland).  
 Oxytropis Halleri.  
 Astragalus alpinus.  
 Ornithopus ebracteatus.  
 Vicia gracilis.  
     Bobartii.  
     bithynica, var. *b.*  
     Orobus (fruit).  
 Lathyrus tuberosus.  
     palustris (fruit).  
     acutifolius.
- Lathyrus sphaericus.  
 Orobus niger.  
 Aremonia agrimonioides.  
 Prunus insititia.  
     domestica.  
 Spiræa salicifolia.  
 Alchemilla conjuncta (*sponte*).  
 Potentilla verna.  
     norvegica.  
 Fragaria elatior (*sub-sponte*).  
 Rubus Leesii.  
     suberectus.  
     plicatus.  
     affinis.  
     lentiginosus.  
     Lindleianus.  
     incurvatus.  
     imbricatus.  
     ramosus.  
     latifolius.  
     pubescens.  
     thyrsoides.  
     Grabowskii.  
     Colemanni.  
     Salteri.  
     calvatus.  
     carpinifolius.  
     villicaulis.  
     derasus.  
     adscitas, *Genev.*  
     macrophyllus.  
     Schlectendalii.  
     amplificatus.  
     glabratus.  
     Borreri.  
     Bloxamii.  
     Hystrix.  
     pygmæus.  
     scaber.  
     mutabilis.  
     Leightoni.  
     denticulatus.  
     Kœhleri (*verus*).  
     infestus.  
     pallidus.  
     fusco-ater.  
     Briggsii.  
     Lejeunii.  
     pyramidalis.  
     Guntheri.  
     humifusus.  
     foliosus.  
     Bellardi.  
     hirtus.  
     Balfourianus.  
     conjungens.  
     purpureus.  
     althæifolius.  
     tuberculatus.  
     cæsius, vars., named.  
     Chamæmorus, (Wales).  
 Dryas depressa.

Rosa rubella.  
   Doniana.  
   Robertsoni.  
   Smithii.  
   lævigata.  
   Moorei.  
   occidentalis.  
   cordifolia.  
   Grovesii.  
   pomifera.  
   cærulea.  
   suberecta.  
   farinosa.  
   scabriuscula.  
   sylvestris.  
   obovata.  
   permixta.  
   sylvicola.  
   Briggsii.  
   Hystrix.  
   sepium.  
   Billietii.  
   cryptopoda.  
   pulverulenta.  
   surculosa.  
   sphærica.  
   senticosa.  
   biserrata.  
   frondosa.  
   dumetorum.  
   pruinosa.  
   incana.  
   tomentella.  
   obtusifolia.  
   latebrosa.  
   aspernata.  
   collina.  
   concinna.  
   decipiens.  
   subcristata.  
   Hailstoni.  
   implexa.  
   coriifolia.  
   Watsoni.  
   celerata.  
   Borreri.  
   Bakeri.  
   marginata.  
   systyla.  
   leucochroa.  
   Desvauxii.  
   opaca.  
   Monsoniæ.  
   bibracteata.  
   austriaca.  
 Coloneaster vulgaris.  
 Mespilus germanica.  
 Pyrus torminalis.  
   latifolia.  
   scandica.  
   semipinnata.  
   fennica.

Pyrus Pyrastrer.  
   Achras.  
   Briggsii.  
 Lythrum Hyssopifolia.  
 Epilobium anagallidifolium.  
~~Æ~~nothera biennis.  
   odorata.  
 Isnardia palustris.  
 Circæa intermedia (lutetiana).  
   intermedia (alpina).  
 Myriophyllum pectinatum.  
 Callitriche verna (fruit).  
   obtusangula.  
   truncata.  
   autumnalis.  
 Ribes sylvestre.  
   Smithianum.  
   spicatum.  
 Sedum teretifolium.  
   micranthum.  
   dasyphyllum.  
   sexangulare.  
   albescens.  
   rupestre.  
   Forsterianum.  
 Sempervivum tectorum (*quasi-sponte*).  
 Saxifraga stellaris, var. vivipara.  
   Geum, vars. (Irish).  
   hirsuta.  
   umbrosa.  
   cernua.  
   cæspitosa.  
   Sternbergii.  
   decipiens.  
   sponhemica.  
 Astrantia major.  
 Eryngium campestre (Kent).  
 Helosciadium repens.  
   Moorei.  
 Trinia vulgaris.  
 Sium latifolium.  
 Bupleurum aristatum (Sussex).  
 Œnanthe silaifolia (root-leaves).  
 Siler trilobum.  
 Meum Athamanticum.  
 Peucedanum palustre.  
 Tordylium maximum.  
 Caulis latifolia.  
 Chærophyllum sativum.  
 Coriandrum sativum.  
 Cornus suecica.  
 Lonicera Caprifolium.  
 Linnæa borealis.  
 Galium erectum.  
   Mollugo, vars. b and c.  
   nitidulum.  
   elongatum.  
   anglicum.  
   Vaillantii.  
 Asperula arvensis.  
   taurina.  
 Valeriana pyrenaica.

OE



- Valerianella carinata.  
     mixta.  
     eriocarpa and b. glabra.  
 Carduus pycnocephalus, *Jacq.*  
     polyanthemos.  
     litigiosus.  
     tuberosus.  
     setosus.  
     hybridi (any).  
 Arctium intermedium.  
     nemorosum.  
 Saussurea alpina.  
 Centaurea solstitialis.  
     paniculata.  
 Matricaria inodora, vars. b and c.  
 Anthemis anglica.  
 Diotis maritima.  
 Filago apiculata.  
 Gnaphalium pilulare.  
     luteo-album.  
     norvegicum.  
     hyperboreum.  
 Senecio vulgaris, var. hibernica.  
     paludosus.  
     palustris.  
     maritima.  
 Bidens radiata.  
     hybrida.  
 Inula salicina.  
 Aster salignus.  
 Hypochaeris Balbisii.  
 Picris arvalis.  
 Tragopogon grandiflorus.  
     porrifolius (*sub-sponte*).  
 Taraxacum lævigatum.  
 Lactuca Scariola.  
 Mulgedium alpinum.  
 Sonchus glabra.  
     palustris.  
 Crepis setosa.  
     succisifolia.  
     nicæensis.  
 Hieracium. (Any named by competent  
     authority, except—  
     Pilosella.  
     murorum.  
     vulgatum (type).  
     umbellatum.  
     boreale.  
 Phyteuma spicatum.  
 Campanula latifolia purpurea.  
     persicifolia (*sub-sponte*).  
 Rapunculus.  
 Vaccinium uliginosum.  
 Arctostaphylos alpina.  
 Arbutus Unedo (*sponte*).  
 Loiseleuria procumbens.  
 Menziesia polifolia.  
     cærulea.  
 Pyrola rotundifolia.  
     secunda.  
     uniflora.  
 Monotropa hirsuta.  
 Erythæra latifolia.  
 Cicendia pusilla.  
 Gentiana nivalis.  
     germanica.  
 Cuscuta Epilinum.  
 Solanum miniatum.  
 Verbascum pulverulentum.  
     Lychnitis.  
     Blattaria.  
     hybrida (any).  
 Scrophularia Ehrharti.  
     Scorodonia.  
 Linaria Pelisseriana.  
     repens, var. b.  
     speciosa.  
     purpurea (*sub-sponte*).  
 Veronica verna.  
     spicata.  
     hirsuta.  
     tenella.  
 Euphrasia officinalis, vars.  
 Bartsia rotundata.  
 Rhinanthus major.  
 Melampyrum cristatum.  
     ericetorum.  
 Orobanche arenaria.  
     cærulea.  
     caryophyllacea.  
     elatior.  
     Picridis.  
     amethystea.  
 Mentha alopecuroides (*sponte*).  
     sylvestris, vars. b and c.  
     vulgaris.  
     pubescens.  
     citrata, flowers (*quasi-sponte*).  
     hirsuta, var. b.  
     sativa, var. subglabra, *Baker*.  
     rubra.  
     gracilis.  
     cardiaca (*quasi-sponte*).  
     pratensis.  
     gentilis, vars.  
     arvensis, vars. b, c, d, e, f.  
     erecta.  
 Thymus Serpyllum, forms of.  
     Chamædrys.  
 Origanum macrostachyum.  
 Calamintha Briggsii.  
 Salvia clandestina.  
     pratensis.  
 Ballota ruderalis.  
 Stachys germanica.  
 Galeopsis intermedium.  
     ochroleuca.  
     bifida.  
 Lamium intermedium.  
     decipiens.  
 Ajuga pyramidalis.  
 Teucrium Botrys (*Sanderstead*).  
     Scordium.



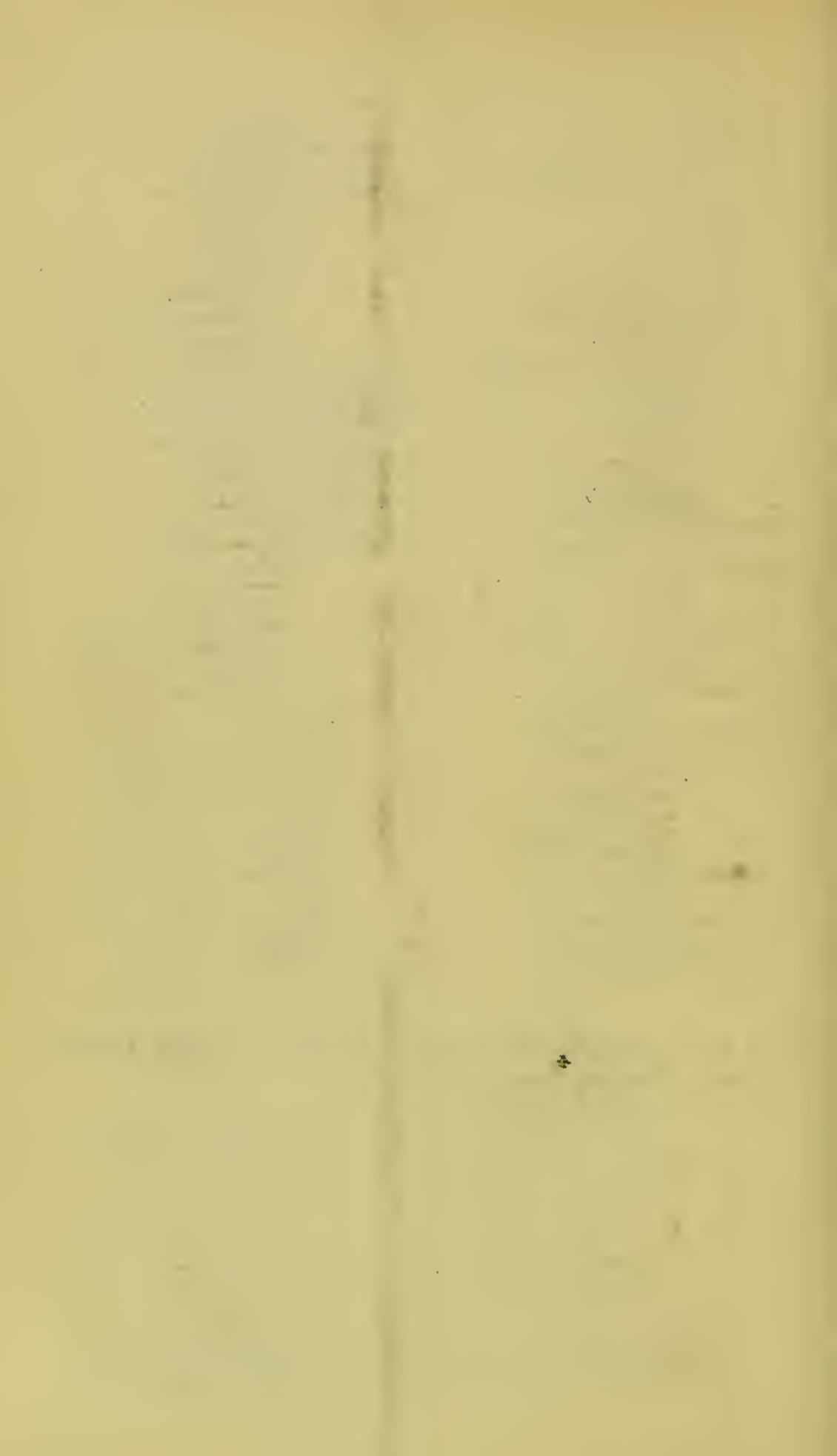
- Pulmonaria officinalis.  
 Lithospermum purpureo-cæruleum.  
 Myosotis strigulosa.  
     alpestris (England).  
     umbrosa.  
     Mittenii.  
 Anchusa officinalis.  
 Asperugo procumbens.  
 Pinguicula graniflora.  
     alpina.  
 Utricularia neglecta (flowers).  
     minor (flowers).  
     intermedia (flowers).  
     Bremii.  
 Primula scotica, var. b.  
 Cyclamen hederifolium.  
 Lysimachia thyriflora.  
     punctata.  
     ciliata.  
 Anagallis cærulea.  
 Armeria duriuscula.  
 Statice pyramidalis.  
     Dodartii.  
     caspia.  
 Plantago Timbali.  
     hirsuta.  
     arenaria.  
 Amaranthus Blitum.  
 Salicornia procumbens.  
     radicans.  
 Chenopodium cymosum.  
     ficifolium.  
     urbicum.  
     intermedium.  
     botryoides.  
     glaucum.  
 Atriplex erecta, vars. a and b.  
     prostrata.  
     Smithii.  
     triangularis.  
     rosea, *L.*  
 Rumex conglomeratus, forms of.  
     rupestris.  
     viridis, forms of.  
     Warrenii.  
     palustris.  
     pulcher.  
     obtusifolius, forms of.  
     consersus.  
     elongatus.  
     trigranulatus.  
     aquaticus.  
     maximus.  
     alpinus.  
     hybrida (any).  
 Polygonum agrestinum.  
     microspermum.  
     rurivagum.  
     littorale.  
     maritimum.  
     elatum.  
     maculatum.  
     viviparum.  
 Hippophaë rhamnoides.  
 Daphne Mezereum (leaves).  
 Asarum europæum (*sponte*).  
 Aristolochia Clematidis.  
 Euphorbia Peplis.  
     stricta.  
     hiberna.  
     pseudo-Cyparissias.  
     Cyparissias.  
     Lathyris.  
     coralloides.  
     dulcis.  
 Mercurialis ambigua.  
 Ceratophyllum submersum.  
 Parietaria fallax.  
 Urtica pilulifera.  
     Dodartii.  
 Ulmus glabra.  
     montana, vars. b. and c.  
 Quercus intermedia.  
 Betula alba, vars. a, b, and c.  
 Populus alba (female flowers).  
     canescens (female flowers).  
     tremula, vars. a and b.  
 Salix viridis.  
     Russelliana.  
     Woolgariana.  
     Lambertiana.  
     Doniana.  
     Helix.  
     intricata.  
     stipularis.  
     pseudo-stipularis.  
     rugosa.  
     acuminata.  
     oleifolia.  
     sphaclata.  
     phylicifolia, vars. named.  
     nigricans, vars. named.  
     ambigua and vars.  
     repens, vars. named.  
     rosmarinifolia.  
     angustifolia.  
     Lapponum and vars.  
     Arbuseula and vars.  
     Myrsinites, vars.  
     Grahami.  
     Bakeri.  
     Moorei.  
     Sadleri.  
 Pinus sylvestris (*sponte*).  
     pinaster.  
 Taxus fastigiata.  
 Typha media.  
     angustifolia.  
 Sparganium affine.  
     minimum.  
 Arum italicum.  
 Potamogeton pseudo-fluitans.  
     linearis.  
     plantagineus.  
     sparganiifolius.  
     Lonchitis.

- Potamogeton nitens.  
     acuminatus.  
     decipiens (flowers).  
     longifolius.  
     zosterifolius.  
     acutifolius.  
     trichoides.  
     pectinatus (type).  
     filiformis.  
 Zannichellia (any).  
 Ruppia spiralis.  
 Zostera nana.  
 Naias flexilis.  
 Zcheuchzeria palustris.  
 Sagittaria sagittifolia (winter bulbs).  
 Alisma lanceolatum.  
     natans.  
 Stratiotes aloides (male flowers and fruit).  
 Orchis hircina.  
     purpurea.  
     militaris.  
     Simia.  
     laxiflora.  
     incarnata.  
 Neotinea intacta.  
 Ophrys arachnites.  
 Spiranthes aestivalis.  
     gemmaipara.  
 Epipactis ovalis.  
     violacea.  
 Cephalanthera rubra.  
 Epipogon aphyllum.  
 Corallorhiza innata.  
 Liparis Loeselii.  
 Malaxis paludosa.  
 Cypripedium Calceolus.  
 Sisyrrinchium Bermudiana.  
 Trichonema Columnna.  
 Gladiolus illyricus.  
 Iris citrina.  
     Bastardi.  
     tuberosa.  
 Crocus aureus.  
     biflorus.  
 Narcissus Bromfieldii.  
     major.  
     poeticus.  
     Tazetta.  
 Leucojum vernum.  
 Polygonatum verticillatum.  
     officinale.  
     intermedium.  
 Lloydia serotina.  
 Ornithogalum nutans.  
 Muscari racemosum.  
     comosum.  
 Allium Ampeloprasum, vars. a and b.  
     Babingtonii.  
     vineale, var. a.  
     complanatum.  
     Schænoprasum.  
     carinatum.  
 Allium paradoxum.  
     Moly.  
 Simethis bicolor.  
 Luzula sudetica.  
 Juncus castaneus.  
     filiformis (Scotland).  
     macrocephalus.  
     Kochii.  
     compressus.  
 Scirpis uniglumis.  
     parvulus.  
     Holoschænus (root-leaves).  
     pungens.  
 Eriophorum alpinum.  
     gracile.  
 Kobresia caricina (England).  
 Carex rupestris.  
     incurva.  
     Ehrhartiana.  
     pseudo-divulsa.  
     Boeninghausenia.  
     lagopina.  
     alpicola.  
     bracteata.  
     alpina.  
     Buxbaumii.  
     stricta.  
     Watsoni.  
     uliginosa.  
     Gibsonii.  
     Micheliana.  
     stictocarpa.  
     irrigua.  
     limosa.  
     ornithopoda.  
     ericetorum.  
     tomentosa.  
     ustulata.  
     frigida.  
     punctata.  
     speirostachya.  
     ebracteata.  
     Kochiana.  
     involuta.  
     pulla.  
     Grahami.  
 Spartina alterniflora.  
 Chamagrostis minima.  
 Digitaria humifusa.  
 Echinochloa Crus-galli.  
 Setaria verticillata.  
 Hierochloa borealis (with root-leaves).  
 Anthoxanthum Puelii.  
 Alopecurus pronus.  
     Watsoni.  
 Sesleria flavescens.  
 Lagurus ovatus.  
 Polypogon littoralis.  
 Agrostis interrupta (England).  
 Calamagrostis lanceolata.  
     Hookeri.  
     tenella.  
 Corynephorus canescens.

*Aira caespitosa*, vars. b. and c.  
     *montana*.  
*Avena strigosa*.  
     *fatua*, vars. a, b, and c.  
*Koeleria cristata*, var. c.  
*Poa bulbosa*.  
     *stricta*.  
     *laxa*.  
     *glauca*.  
     *Balfourii*.  
     *Parnellii*.  
*Cynosurus echinatus*.  
*Festuca ovina*, vars. b., c., and d.  
     *arenaria*.  
     *arundinacea*.  
*Bromus Benekenii*.  
     *rigidus*.  
     *pubescens*.  
     *Lloydianus*.  
     *patulus*.  
*Brachypodium glabrescens*.  
     *pubescens*.  
*Triticum biflorum*.  
     *pungens*.  
     *acutum*.  
*Lolium arvense*.  
     *linicola*.  
*Hordeum sylvaticum*.  
*Trichomanes radicans*.  
     *Andrewsii*.  
*Adiantum Capillus-Veneris*.  
*Asplenium germanicum*.  
     *anceps*.  
     *microdon*.  
     *acutum*.  
     *serpentini*.  
     *fontanum*.  
*Athyrium molle*.  
     *incisum*.  
*Woodsia hyperborea*.  
     *ilvensis*.  
*Cystopteris dentata*.  
     *Dickieana*.

*Cystopteris alpina*.  
     *montana*.  
*Aspidium Lonchitis*.  
     *lobatum*.  
*Nephrodium abbreviatum*.  
     *pumilum*.  
     *rigidum*.  
     *cristatum*.  
     *remotum*.  
     *uliginosum*.  
     *collinum*.  
     *nanum*.  
     *glandulosum*.  
*Polypodium flexile*.  
*Gymnogramme leptophylla*.  
*Ophioglossum ambiguum*.  
     *lusitanicum*.  
*Botrychium rutaceum*.  
*Lycopodium annotinum*.  
*Isoetes echinospora*.  
     *Hystrix*.  
*Equisetum pratense* (fruct.).  
     *alpestre*.  
     *subnudum*.  
     *paleaceum*.  
     *variegatum*.  
     *arenarium*.  
     *Wilsoni*.  
     *trachyodon*.  
*Chara flexilis*.  
     *syncarpa*.  
     *translucens*.  
     *mucronata*.  
     *gracilis*.  
     *tenuissima*.  
     *glomerata*.  
     *intricata*.  
     *alopecuroides*.  
     *crinita*.  
     *foetida*.  
     *hispida*.  
     *tomentosa*.  
     *fragilis*.

Any of the "Excluded Species," in addition to those named in the above List, will be acceptable.



THE  
BOTANICAL EXCHANGE CLUB.

---

REPORT FOR 1877-8.

---

LONDON:

PRINTED BY WEST, NEWMAN & CO., 54, HATTON GARDEN, E.C.

—  
1879.

LONDON :  
WEST, NEWMAN AND CO., PRINTERS,  
54, HATTON GARDEN, E.C.



## THE BOTANICAL EXCHANGE CLUB.

---

### NOTES ON THE PLANTS GATHERED IN 1877.

EDITED BY T. R. A. BRIGGS.

---

*Ranunculus fluitans*, L., b. *Bachii*. River Blythe, near Coles-hill, &c., Warwickshire (v. c. 38). August 11, 1877. Confirmed by Hiern.—J. E. BAGNALL. No; true *R. fluitans*.—C. C. BABINGTON.

*R. peltatus*, Fries, a. *truncatus*. Pond, Arlington, E. Sussex, June, 1877.—J. H. A. JENNER. Sutton Park, Warwickshire, June, 1877.—J. E. BAGNALL.

“*Ranunculus*, near *elongatus*, Hiern, Mon.” Tweed, near Sprouston, Roxburgh, July, 1877. This comes very near *elongatus* of Hiern, Mon., but I think it a state of *floribundus*, the nearly glabrous carpels showing also an approach to *triphyllos*.—ANDREW BROTHERSTON. Weak *peltatus*.—C. C. BABINGTON.

*Fumaria pallidiflora*, Jord., b. *Borai*. Old quarry, near Richmond, Yorkshire, 1877.—DR. ST. BRODY. I incline to think this true *Borai*.—C. C. BABINGTON.

*Brassica Rapa*, &c. Specimens from Mr. H. C. Watson sent to show descent of *B. Briggsii* unchanged in garden for some years; differences between early leaves of the turnip and swede, &c. A most valuable set.—C. C. BABINGTON.

*Sisymbrium Irio*, L. Berwick-on-Tweed, June and October, 1877. Recorded from the same station by Ray. Confined to a small space both on the walls and on the ground, but there in profusion.—ANDREW BROTHERSTON.

*Alyssum incanum*. Waste places, site of camp, Lewes, E. Sussex, June, 1877.—J. H. A. JENNER. Among sown clover, near Pirford, Surrey, 1870.—H. C. WATSON.

*Viola peruieta*, Jord. Neighbourhood of Plymouth, 1877.—T. R. ARCHER BRIGGS. Wood, Hurtmore, Godalming, Surrey, April, 1877.—Col. by T. CHURTON; com. by H. and J. GROVES. Hedgebank, near Welwyn, Herts, April, 1877.—T. B. BLOW. Cherry Wood, Fownhope, Herefordshire, February 20, 1877. In abundance and in full flower at this early date. The soil is lime-

stone, and true *hirta* is abundant in parts of the district. This Cherry-wood plant is slightly scented, as *odorata*. The same, or a violet closely resembling this, is abundant in copses on the sandstone at Breinton, Herefordshire, where no true *hirta* that I know of occurs.—AUGUSTIN LEY. I continue to have much doubt and difficulty about these plants. Jordan finds a difference in the form of the leaves between *V. permixta* and *V. sepincola*. I do not find any difference between the specimens sent and all named *permixta*.—C. C. BABINGTON.

*V. lactea*, Sm. Gravelly heath, Staplers, Isle of Wight, June 7, 1877.—FRED. STRATTON. Lizard Down and Debigna Wood, W. Cornwall, June, 1877.—J. CUNNACK. I would rather label some of Mr. Stratton's specimens as the var. b. *intermedia*, Wats. Still I believe *lactea* is only a variety of Linnean *canina*, as Babington makes it.—T. R. A. BRIGGS.

*V. tricolor*, var. Sandy ground, St. Martin's, Scilly Islands, July 3, 1877.—J. RALFS. It is certainly, as Mr. Baker thought, very like *V. parrula*, Tin., but seems to be too much branched. My Sicilian specimens of *V. parrula* are nearly simple, as described by Gussone; ours are all much branched. But other specimens from Sicily, named and distributed by Huet de Pavillon, are exceedingly like ours and branched.—C. C. BABINGTON.

*V. Curtisii*, Forst. Lytham sandhills, Lancashire, June, 1877. A hitherto (so far as I can find out) unrecorded locality, but, as the various examples will show, represented here most abundantly in well nigh every variety of form, and likewise gradation of colour. The most frequent are the wholly purple, or wholly yellow—the latter much resembling *V. lutea*, Huds., but smaller. The species is far more abundant at Lytham than at Southport or New Brighton sandhills; indeed, though the latter place is mentioned in all the floras as a habitat of *V. Curtisii*, a diligent though fruitless search in the summers of 1868 and 1869 causes me to believe it to be now extinct in this locality.—J. C. MELVILLE.

*Polygala depressa*, Wend. Aberdour, Fife, July 26, 1877.—D. DOUGLAS. Mr. Douglas sent me a specimen of this, which I named *P. oxyptera*. On seeing a number of specimens I am now convinced I was wrong, and that it is *P. depressa*, but a form approaching *P. oxyptera*.—J. T. BOSWELL.

*Hypericum linarifolium*, Vahl. Christow, on rocks a mile or more from River Teign, June, 1877. Rocks near River Teign, Trusham, June 20 and September, 1877.—W. MOYLE ROGERS.

*Tilia grandifolia*, Ehrh. Very abundant in the woods, clothing the gorge of the Teme at Downton Castle, Herefordshire. It has all the appearance of being native here, growing mixed with oak and other native timber. The valley of the Teme at Downton bears great resemblance to that of the Wye, at Symond's Yat, where this lime is also abundant.—AUGUSTIN LEY.

*Geranium nodosum*, L. Abundantly naturalized near Malvern, Worcestershire, July, 1877.—J. C. MELVILLE.

*G. Robertianum*, L., b. *modestum*. Shady rocky ravine, Christow, S. Devon, June 23, 1877.—W. MOYLE ROGERS. Although having

the glabrous carpels, this plant seems to me otherwise too hairy to quite agree with *G. modestum*, Jord.—T. R. A. BRIGGS.

*Trifolium repens*, L., var. *Townsendi*. Tresco and St. Martin's, Scilly, W. Cornwall.—J. RALPHS. A plant sent from Gunwalloe Lizard by Mr. Cunnack, as this, is only *repens* with slightly purplish flowers.—T. R. A. BRIGGS.

*T. suffocatum*, L. Rocky ground, Trusham, S. Devon, May 31, 1877.—W. MOYLE ROGERS. Remarkable from occurring in an inland locality, as noticed by the contributor in 'Journ. of Bot.'

"*Rubus derasus*." Plantation, Speke, Lancashire, September, 23, 1876.—J. HARBORD LEWIS. I do not consider this to be the plant so named in my 'Manual,' which I now call *R. adscitus*, Genev. I think it is *R. carpinifolius*. I cannot find that I have ever had a specimen from Mr. Harbord Lewis. The presence of a few setæ and aciculi renders this determination a little doubtful, but probably we may easily lay too much stress upon that character. I think it very likely that all my *Sylvatici* may sometimes have a few setæ and aciculi.—C. C. BABINGTON.

*R. hirtifolius*, Wirtg.? Hedge, Derriford, Egg Buckland, S. Devon, July 17, 1877. Apparently identical with a bramble labelled *hirtifolius*, Wirtg., in Mr. Baker's collection of Continental *Rubi*.—T. R. A. BRIGGS. I have a specimen of *hirtifolius* (Wirtg. Herb. Rub., ed. 1, No. 173), which is very much like this. But Focke thinks that published specimen doubtful. He thinks that it may possibly be a form of the *R. pyramidalis*, Kaltenb., but I can hardly agree with him, with his own specimen of the latter (*Rub. Select.*, 65) before me. That has, as he describes it, a truly pyramidal panicle with patent branches; not like the Derriford plant and the above No. 173. By "folia subtus subvelutina" Focke appears to mean what I should describe as "hairy only on the veins." The Derriford plant seems to be very near to *R. amplificatus*, Lees = *R. stereacanthus*, Müll.; neither of which are, I think, noticed by Focke. I was probably wrong in identifying *R. umbraticus*, Müll., with *R. amplificatus*, as Focke is probably correct in joining that to *R. pyramidalis*, Kaltenb. My specimens of *R. umbraticus* are from Wirtgen (*H. R.*, ed. i. iv., 82), and Boulay (No. 9), both apparently authenticated by Müller. I need hardly add that my *R. pyramidalis* is a totally different plant, which Focke considers as near to his *R. myricæ*, but can hardly be correct in doing so. But I have not seen any specimen of *R. myricæ*.—C. C. BABINGTON.

"*R. macrophyllus*, Weihe, a. *glabratus*, fide Babington." Form with 3-nate leaves. Hedge, Harrietfield, Berwick, October 6, 1877. Extending for a considerable distance along a hedge. The two seasons that I have seen this plant all the leaves on the barren stem have been 3 nate. The same form on the sea coast at Fenham Mill, Northumberland.—ANDREW BROTHERSTON.

*R. Bloxamii*, Lees. Roadside between Marsh Mill and Plympton St. Mary Church, S. Devon. A plant with quite a restricted distribution, yet abundant in some spots. A specimen from Crabtree was labelled *Bloxamii* by the late Rev. A. Bloxam.



July 9, 1877.—T. R. A. BRIGGS. Of course this plant from Marsh Mill is not typical. A specimen of the same from Crabtree collected in July, 1865, is marked in my herb. as authentic *R. rhenanus*, Müll., on the authority of Genevier. I cannot find any description of *R. rhenanus*, and have no foreign specimen of it. It differs in several respects from true *R. Bloxamii*, of which I have a good series before me from Lees and Bloxam, by its much more hairy stem,—indeed, hairiness throughout,—but especially by its beautiful pyramidal, open, nearly naked panicle, with long corymbose few-flowered branches which are quite simple in their lower part. It should not go out as *R. Bloxamii* without note or comment, as it would convey a wrong idea of that plant.—C. C. BABINGTON.

“*R. scaber*, Weihe?” Neighbourhood of St. Budeaux, S. Devon, 1877.—T. R. A. BRIGGS. I think that this may be correct. Its very slightly-armed stem is remarkable, and in that respect I have nothing like it.—C. C. BABINGTON.

*R. Kochleri*, Weihe, var. *caratifolius*, Weihe, *vide* Babington.” Field-border, Sellack, Monmouthshire, July 13, 1877.—AUGUSTIN LEY.

“*R. fusco-ater*, Weihe.” Broomsgrove Lickey, Worcester, October, 1877.—J. FRASER. This plant is *R. Kochleri*  $\gamma$ . *pallidus*.—C. C. BABINGTON.

“*R. fusco-ater*, Weihe.” Heslington, near York, September, 1877.—GEO. WEBSTER. *R. Kochleri*,  $\alpha$ .—C. C. BABINGTON.

“*R. tuberculatus*, Bab.” Kew, Surrey, July, 1877.—J. G. BAKER. Not my plant, nor much like it. It is very like *R. Balfourianus*, especially resembling a plant so named by me in the Herb. Borrer from Eridge Wood, near Tonbridge Wells; indeed almost the only difference is found in the more furrowed stem of the Kew plant now issued. The lower part of the stem of typical *R. Balfourianus* is not furrowed, although its upper part often is so. I have never seen it with so furrowed a stem as in this from Kew.—C. C. BABINGTON.

*Rosa fetida*, Bast. Hedge, Thames Ditton, Surrey, September, 1877.—H. GROVES. A form of *tomentosa* allied to *scabriuscula* and *sylvestris*.—T. R. A. BRIGGS.

*R. micrantha*, Sm. Hedge on roadside near E. Muirdean, Roxburgh, October, 1877. Bank on roadside between Kelso and Newthorn, Berwickshire, August and October, 1877. Roadside between Kelso and Yetholm, Roxburgh, November 2, 1877 and 1878. I send specimens of this from three stations; those from the two last named have hairy styles.—ANDREW BROTHERSTON.

*R. senticosa*, Ach. Near Knowle, Warwickshire, July 28, 1877. It occurs in some abundance, but I have only been able to send a very limited supply owing to the paucity of flowers this year.—J. E. BAGNALL.

*R. decipiens*, Dum. Near Sutton, Warwickshire, 1877. This was first found in the county by the Rev. A. Bloxam near Harboro' Magna. The specimens are from a new station, where I found several bushes. It is not what I should consider the typical form,

as the calyx is not glandulose, but is that mentioned in Baker's monograph as occurring in Leicestershire and Cheshire. In this respect Mr. Bloxam's plant is similar.—J. E. BAGNALL.

*R. systyla*, Bast. Hedge near Shirley, S. Hants, August, 1877.—J. GROVES. Similar to the Devon *systyla*, considered by Déséglise to be rightly so named.—T. R. A. BRIGGS.

*R. leucochroa*, Desv. Near River Teign, Trusham, 1877.—W. MOYLE ROGERS. A well-marked rose that abounds in Devon and Cornwall.—T. R. A. BRIGGS.

*Pyrus torminalis*, Ehrh. Bradfield, Essex, September, 1877.—H. E. FOX. A remarkable form with leaves very deeply lobed.

*Saxifraga hypnoides*, L., var. Dry limestone rocks, Black Head, Co. Clare, Ireland, May 13, 1876. A variety mentioned in Cyb. Hib., having the leaves clustered in a singularly dense manner, nearly glabrous, the leaves and sepals broader and blunter than in *hypnoides* of the north of Ireland. The fls. small, but the stamens larger and rounder. In some quantity on bare dry limestone rocks.—S. A. STEWART.

*Tordylium maximum*, L. Ditch-banks, Tilbury, Essex, July, 1877.—EYRE DE CRESPIGNY. This would seem at least established in the locality from the further supply sent by the discoverer (see B. E. C. Rep., 1876, p. 20).—T. R. A. BRIGGS.

*Valerianella carinata*, Lors. Helston, Cornwall, July, 1877.—J. CUNNACK. Stone-dyke, Penzance, June 4, 1877.—W. B. WATERFALL. Several places near Plymouth.—T. R. A. BRIGGS. Hedge-bank, near Bovey Tracey, Devon, May 26, 1877.—W. MOYLE ROGERS. Hedge-bank, Dundonald, Co. Down, Ireland, June 19, 1877.—S. A. STEWART. Beeston Tor, near Wetton, N. Staffordshire, June 14, 1877. Riversdale, Derbyshire, June 12, 1877. I am convinced that this is as native as *V. olitoria*, Moench., in the limestone dales of Derbyshire and N. Staffordshire. This year I found it in two spots in Ravensdale, Derbyshire, growing on the limestone crags in company with *V. olitoria*, amid such purely native vegetation as *Potentilla verna*, &c. Similarly, and again mixed with *V. olitoria*, in the limestone dales near Wetton, N. Staffordshire; and I used to find it in precisely similar situations near Buxton in 1868–70. In all these cases the two allied species seemed to be inseparable companions. The occurrence of the common one was a sure sign that the rarer was somewhere near.—AUGUSTIN LEY. I quite endorse the Rev. A. Ley's remarks as to this being as much a native as *V. olitoria*. In the neighbourhood of Plymouth it is not restricted to a limestone soil.—T. R. A. BRIGGS.

*V. eriocarpa*, Desv. Dry hedge-bank, Rame, E. Cornwall. At least established here, June 14, 1877. T. R. A. BRIGGS. East Green, Penzance, W. Cornwall, May 29, 1877.—W. B. WATERFALL.

*Carduus tenuiflorus*, Curt., form of; *C. pycnocephalus*, Jacq. (verus). On limestone rocks above the coast, Hoe, Plymouth, June, 17, 1877. On receiving a specimen from me of this peculiar form of *C. tenuiflorus*, Mr. H. C. Watson remarked, in a letter:—

“By the tomentose pericline this should go to *C. albidus*, Bieb., fide DC. Prodr., which so distinguishes *C. albidus* from *C. pycnocephalus*. Both are there placed as vars. under *C. tenuiflorus*. But, setting aside the tomentose involucre, your specimen is nearer *pycnocephalus*.”—T. R. A. BRIGGS.

“*C. nutanti-crispus*?” Downs, Lewes, Sussex.—J. H. A. JENNER. “*C. nutanti-erispus*.” Lutterworth, Leicestershire, September, 26, 1877.—F. T. MOTT. Nearly typical *acanthoides*. The down on the under side of the leaves is usually more abundant than it is said to be in my ‘Manual.’—C. C. BABINGTON.

*Senecio palustris*, DC. Fen, with *Cladium Mariscus*, *Rhynchospora alba*, *Ranunculus Lingua*, *Nephradium Thelypteris*, &c., East Norfolk, July, 1877. About twenty plants were seen, some having only radical leaves, others in flower and fruit.—A. BENNETT.

*Sonchus lacerus*. Kew, Surrey, August, 1877.—J. G. BAKER. An interesting form of *S. oleraceus*.—C. C. BABINGTON.

*Hieracium pratense*, Tausch. Roadside east of Edinburgh, July 11, 1877. Very abundant. Plants in my garden produce in July flowers like the specimens; in September they again flower, and then produce a few on the stolons, as well as in the usual way.—A. CRAIG-CHRISTIE.

*H. lasiophyllum*, Koch. Craig Breidden, Montgomeryshire, on limestone rocks, June, 1877.—AUGUSTIN LEY. Differs considerably from my plant. Far nearer *H. pallidum*, if not really it.—C. C. BABINGTON.

*H. juranum*, Fr. *H. Borreri*, E. B., ed. iii. Cultivated at Balmûto (said to be from Harehead Wood, Selkirk, Dickson). From Messrs. Borrer and Watson, October, 1877.—J. T. BOSWELL.

*H. Dewari*, Boswell in Trans. Bot. Soc. Edin., 1878. (See B. E. C. Rep., 1876, pp. 26, 27). I suppose I have the Loch Long plant ticketed as found by myself at Arroquhar, Dumfriesshire, August 23, 1842, marked as *H. inuloides* by me, but corrected *H. strictum* by Backhouse. I find no trace of ever having called it *H. Lapeyrousii*. I have also a specimen from Killin (August 1, 1844), formerly called *H. denticulatum* and *H. strictum*; and one from Inverarnan, Loch Lomond, similarly named; which I believe are *H. Dewari*. Also one from Glen Maliene, Antrim, gathered by I. Carroll, and called *H. strictum* by Backhouse, which I suppose may be *H. Dewari*. One named *H. strictum*, by Mr. T. Drummond, from Aberdona, Clackmannan (August 12, 1875), is apparently correct.—C. C. BABINGTON.

*Solanum melanocerasum*, Bernh., and *S. villosum*, Lam. These varieties of *Solanum nigrum* are both common about Kew. For descriptions see ‘Boreau, Fl. du Cent.’, vol. ii., p. 466–7. *S. nigrum*, as there restricted, I have never seen.—J. G. BAKER.

“*Linaria vulgari-repens*.” Found at Sulham, near Reading, Berks, August, 1877. Two varieties growing plentifully and near together, but quite distinct, on chalk; one kind white-striped with lilac and yellow throat, the other white, except yellow throat; the sepals of both shorter than the spur, and generally wrinkled with a ring, but some with a wrinkled border.—Miss S. M. PAYNE.



*Mentha alopecuroides*, Hull. A large patch on both sides of the College water, a short distance above Heatlpool, Cheviotland; probably an escape from some of the shepherd's gardens, October, 1877.—ANDREW BROTHERSTON.

*M. pubescens*, Willd. Brookside, near Mitcheldean, West Gloucester, September 13, 1877.—AUGUSTIN LEY. *Mentha pubescens* I call *M. hirsuta*, L., and do not separate the forms given in the 'Students' Flora,' even if they are distinguishable from *M. aquatica*. Is *hirsuta* a slip of the pen for *aquatica*? Of course if *hirsuta* and *pubescens* be the same, a plant cannot be nearer one than the other.

*M. gracilis*, b. "*Cardiaca*." Shrewley Common, Warwickshire, September 12, 1877.—R. L. BAKER. Haseley Common, Warwickshire, September, 1877.—H. BROMWICH. I think not *M. Cardiaca*.—C. C. BABINGTON.

"*Thymus Serpyllum*, approaching *Chamadrys*."—Barnes, Kelso, Roxburgh, August, 1876. A very curious intermediate. I called it *Chamadrys* when I saw it first, but now think it is *eu-Serpyllum*.—J. T. BOSWELL. I doubt if the two bits are from the same plant.—C. C. BABINGTON.

*Stachys annua*, L. Downs near Sevenoaks, Kent, August 4, 1873. Coll. by Jas. Fletcher; com. by W. H. Beeby. The enclosed specimen was collected by my friend, Mr. John Fletcher, who is now in Canada. He writes me that it was growing abundantly on the open downs.—W. H. BEEBY.

*Teucrium Botrys*, Linn. Chalky field in the parish of Selsdon, near Croydon, Surrey. Coll. by Mr. J. Flower, of Croydon, in 1877; com. by A. Bennett. Found in good quantity. Selsdon adjoins Sanderstead, whence the plant was reported many years ago.—A. BENNETT.

*Salicornia radicans*, L. Dawlish Warren, S. Devon, August, 1877.—W. MOYLE ROGERS.

*Rumex*—hybrid between *conglomeratus* and *pulcher*? approaching *pulcher*. Seed from Tothill, Plymouth (see B. E. C. Rep., 1872-4, p. 34), September, 1877.—J. T. BOSWELL: I wish Dr. Boswell had given us a root-leaf of this, as Mr. Briggs had not seen any, and as he has the plant in cultivation.—C. C. BABINGTON.

*Rumex sylvestris*, Wallr., var. Kew, Surrey, August, 1877. Racemes much more slender than in type, very few flowers fertilized, enlarged petals subentire or faintly toothed. Several tufts intermixed with ordinary form.—J. G. BAKER. This, with the few fertilized flowers, has much the look of a hybrid dock. T. R. A. BRIGGS.

"*R. maximus*, Schreb.?" River-side, Braxted, Essex; leaves, July 12; fruits, August 30, 1877. The specimens were taken from plants cut about by the scythe and otherwise damaged by cattle, so that suitable portions for drying were not obtainable.—E. G. VARENNE. *R. maximus*, Schreb. Anglor. River-banks, Lewes, E. Sussex, August, 1877. Some of the plants sent are from Mr. Warren's original locality.—J. H. A. JENNER. Marsh, St. Mary's, Scilly, W. Cornwall, June 30, 1877.—T. R. A. BRIGGS.

*Salix Russelliana*, Sm., fide Leefe. Tweedside, below Trows Crags, Roxburgh, May 29 and September 13, 1876; June 12, 1877. Mr. Leefe, after seeing a specimen, replied:—" *S. Russelliana* in my opinion, though the axis of the aments is more woolly and the leaves broader than usual." *S. Russelliana*, Sm., male and female; Peating Bog, Roxburgh, May, 1876, and September, 1877. Banks of Teviot, near Kelso, Roxburgh, May and September, 1877. This without the catkins would pass for *alba*. I send a series of *Russelliana* that have all been seen and examined by the Rev. J. E. Leefe, who, as will be seen, includes a wide range of forms under that name—from very near *fragilis* on one hand to *alba* on the other.—ANDREW BROTHERSTON.

*Salix* (sp. ?) Peating Bog, Roxburgh, April, 1876. I send this without a name. It seems to have touches of *stipularis*, *Smithiana*, and *ferruginea*, but in some important points does not agree with any of them. The following are some remarks by Mr. Leefe on it:—"This is a peculiar form, leaves resembling *ferruginea*, except as to stipules, and there is a broad leaf which looks suspicious of something else. The catkins resemble *stipularis*, but the germen is manifestly stalked. Pedicel sometimes as long as style. Worthy of further observation. I do not venture to call it *stipularis*." After sending fresh specimens of catkins I had the following reply:—"I see I felt some doubt about this when you first sent it to me. On the whole I should refer it to *stipularis*." As I wished to get his further opinion before sending specimens to B. E. Club, I sent more specimens, and he replied:—"The stipules are not those of *stipularis*, Sm., and the ovarium does not appear to be sessile: I should name it doubtfully *Smithiana*, Willd."—ANDREW BROTHERSTON. I should call this *ferruginea*.—J. T. BOSWELL.

"*Salix* near *rugosa*." Bowmont Forest, Roxburgh, May, 1877; October, 1876. Mr. Leefe says of this:—"I think *S. rugosa*. I have leaves like this from Yorkshire. It varies much in the form and length of the leaves."—ANDREW BROTHERSTON. I am quite puzzled with this. The very long styles—longer than even those of *S. ferruginea*, on the one hand; and the leaves most like those of *cinerea* in texture, also in the venation and condition of the lower surfaces, on the other hand, make up a plant unlike anything I have seen.—J. T. BOSWELL.

*S. Bakeri*, Lond. Cat. Cultivated at Balmuto. From Rev. J. E. Leefe, October, 1877.—J. T. BOSWELL.

*Potamogeton salicifolius*, Wolfg., teste Prof. Babington. In the Wye, Sellack, Herefordshire, July 15, 1877. The name of this is given on the authority of Prof. Babington. I have had it in my herbarium ever since 1866, without knowing what to name it. In the last and the present year I found it again, and sent it up to him. He tells me he feels satisfied that it is the *P. salicifolius* of his 'Manual.' It grows in the Wye in shallow, moderately swift water, and though flowering freely, I have been unable to find any fruit perfected.—AUGUSTIN LEY.

*Najas flexilis*, Rostk. Loch Cluny, in 6–12 feet of water, Perth, September 2, 1876. The discovery of this plant by Mr. Sturrock,

of Blairgowrie, in the summer of 1865, is fully described in the 'Scottish Naturalist.'—H. M. DRUMMOND-HAY.

*Alisma Plantago*, L., b. *lancoletatum*. Ditches, Lewes, E. Sussex, August 25, 1877.—J. H. A. JENNER.

*Juncus compressus*, Jacq. Tweedside, Makerstoun, Roxburgh, July, 1873. Growing close to the edge of the Tweed, in fissures of igneous rock, above twenty miles from the sea. This is the only spot in the district where I have detected the typical inland plant.—ANDREW BROTHERSTON. Confirmed by Dr. Boswell.

*Carex ericetorum*, Pollich. Icklingham Heath, between Thetford and Barton Mills, W. Suffolk; growing plentifully among *Calluna*, with *C. praecox*, &c., on high ground, overlying chalk, May, 1877. More abundant than *C. praecox*, and easily recognised. I also gathered it on the grassy sides of the road beyond the heath for 1½ miles, and found one specimen on Risby Heath.—A. BENNETT.

*Anthoxanthum Puelii*, Lec. & Lam. Whittington, Staffordshire, August, 1877. In abundance in a field, probably introduced with grass seeds. Mr. W. Matthews, of Birmingham, and the Rev. J. H. Thompson found it in another grass field near Churchill, Worcestershire, about two miles from this locality.—J. FRASER.

*Calamagrostis Hookeri*. Gravelly lake shore, Scawdey Islands, Lough Neagh, June 30, 1877.—S. A. STEWART.

*Avena strigosa*, Schreb. Fields, Kelso, Roxburgh, September, 1873; September, 1877. Besides the typical plant I send a few specimens with dark-coloured seeds. Both vars. were equally plentiful in 1873, growing intermixed. The difference in colour is not owing to the stage when gathered. I sowed some seeds of each sort, and both came true. This species is confined to the light soils in this district, whilst *A. fatua* is generally found on the heavy soils.—ANDREW BROTHERSTON.

*A. fatua*, L., c. *pilosa*. Burntisland, Fife, October, 1877.—J. T. BOSWELL.

*Bromus mollis*, L., a coast form of this, combining characters of *glabrescens* and *Lloydianus*. In earth on a wall-top above the coast, Rame Head, E. Cornwall, June 14, 1877.—T. R. A. BRIGGS.

*Triticum acutum*, DC. Leith Links, Edinburgh, August 23, 1877.—D. DOUGLAS. Rightly named.—J. T. BOSWELL. Certainly not *acutum*. Why not *T. repens*?—C. C. BABINGTON.

*Asplenium septentrionale*, Hull. Between Chudleigh and Dartmoor, on rocks facing north, S. Devon, July, 1877.—W. MOYLE ROGERS.

*Ophioglossum vulgatum*, L., b. *ambiguum*. St. Martin's, Scilly, W. Cornwall, June, 1877. The smaller specimens were gathered in the short grass in open places, the larger ones amongst the furze.—J. RALFS.

*Chara flexilis*, L. Pond near Woodford, S. Essex, June, 1877.—H. GROVES. This I had from Mr. Groves from the same place.—C. C. BABINGTON.

*C. syncarpa*, Thuill. Pool, Ashtead, Surrey, June 2, 1877.—J. GROVES. I am not quite prepared to say that this is the typical



plant. May be *C. opaca*. We must attend to the fresh state to see if the characters are correct, viz. :—

1. *syncarpa*. Nucules and globules coated with mucilage, spires of nucules broad flattened, faintly separated.
2. *capitata*. Similar, but nucules with rather acute prominent spires.
3. *opaca*. Nucules and globules naked, spires prominent.—  
C. C. BABINGTON.

*C. translucens*, Pers. Pond near Woodford, S. Essex, June, 1877.—H. GROVES.

*C. intricata*, Roth. Pond, Kelvedon, Essex, June 10, 1877.—  
E. G. VARENNE.

*C. crinita*, Wallr. Swan Pool, Falmouth; coll. by W. Curnow for Mrs. E. A. Lomax, August, 1877. Differs considerably from my specimens from Burdock Pool. I think it may be only a form of *C. fetida*.—C. C. BABINGTON.

*C. fetida*, Braun. The Lizard, W. Cornwall, September, 1877. Coll. by Mr. Curnow for Mrs. E. A. Lomax. *C. fetida* from the Lizard is curious, and worth more attention. It may be different, but I cannot now settle that point. It is apparently the plant from near Kynance Cove, which I named *C. fetida*, var. *densa* of Cosson last year. It is more like Cosson's figure (Atl. Fl. de Paris, p. 37, f. 8) than the Kynance Cove plant.—C. C. BABINGTON.

"*C. hispida*." Shallow pool on downs, Lizard, W. Cornwall; August 25, 1877.—W. B. WATERFALL. *C. polyacantha*, I believe. I so named what is apparently the same plant for Mr. Ralfs from "rivulet on Lizard Downs" last year.—C. C. BABINGTON.

*C. aspera*, Willd. Canal, near Pirbright, Surrey, August, 1877.—H. & J. GROVES. I so named this plant for Mr. Groves last year. It is, I believe, the *C. aspera*, v. *capillata* of A. Braun.—  
C. C. BABINGTON.

*C. fragilis*, Desv. Stream near Lyndhurst, S. Hants, June 26, 1876.—J. GROVES.

*C. fragifera*, Durieu. Pond, Lizard Downs, July 31, 1877.—  
J. RALFS. Chy-an-hal, near Penzance, 1867.—J. RALFS, also W. Curnow for Mrs. E. A. Lomax. I have now an admirable series of this beautiful plant. "*C. fragilis*, stagnant pool near Land's End," from Mr. Waterfall, is, I quite think, *C. fragifera* [as also is probably a plant which Mr. Townsend got at Tresco, in Scilly, in 1862].—C. C. BABINGTON.

T. R. ARCHER BRIGGS.

April, 1879.

## REPORT OF THE PLANTS GATHERED IN 1878.

EDITED BY J. G. BAKER.

*Thalictrum saxatile*. Received this year from Mr. J. H. Jenner from Newmarket, and from Dr. Boswell from the Gog Magog Hills, the specimens from a plant grown in his garden at Balmuto.

*Ranunculus fluitans*. River Eamont, Cumberland, Rev. W. Wood; gathered by W. Hodgson. New to subprovince 25.—A form with floating leaves from the Teviot, near Roxburgh Castle; gathered by Mr. A. Brotherston.

*R. intermedius*, Hiern. Trevethick Moor, Penzance.—J. RALFS.

*Caltha Guerangerii*. Swampy spots in a wood at Lea Mill Bridge, South Devon.—T. R. A. BRIGGS.

*Papaver strigosum*. Myton, Warwick, H. Bromwich; Wolverhampton, Dr. Fraser; and Kew, Surrey, G. Nicholson.

*P. Lecoquii*. Roadside at Kelso, Roxburgh.—A. BROTHERSTON.

*Sisymbrium pannonicum*. Sandy fields at Crosby, Lancashire.—J. COMBER.

*Barbarea stricta* was very plentiful this year along the Surrey side of the Thames between Richmond and Kew.

*B. intermedia*. Wall at Knackersknowle, and near the fort at St. Budeaux, S. Devon.—T. R. A. BRIGGS.

*Viola permixta*. Hedge-bank at Merstham, Surrey, W. H. Beeby; and a bank near Woolhope, and a boggy wood at Brunton, Herefordshire, Rev. A. Ley.

*Drosera intermedia*. "A curious stalked form of this species, which I have named in manuscript *subcaulescens*, was found this summer in one place near Wybunbury Bog, Cheshire. It grew in floating masses in a peat-ditch filled with water, in the very wettest portion of the moss, where it was almost impossible to walk, the roots in some cases floating also, as in *Utricularia*, and almost or quite free from adherence of earthly matter."—J. C. MELVILLE.

*Polygala vulgaris* var. *grandiflora*. Specimens so named were sent from Cwm Idwal, Carnarvon, Rev. A. Ley; and chalk *débris* near Dover, A. Bennett. These I asked Mr. A. W. Bennett to examine, and he reports:—"The specimens marked *Polygala vulgaris* var. *grandiflora* from Cwm Idwal, collected by Mr. A. Ley, are nothing but rather large-flowered specimens of the ordinary form. Those with the same name, gathered by Mr. A. Bennett near Dover, more resemble the Ben Bulben variety, both in the smaller lower leaves and fleshy habit, and in the apiculate wiry sepals. Still, no one who saw them together would say that the Kentish plant exhibited more than an approach towards the remarkable Irish variety."

*Lychnis Githago*. Mr. T. Leighton, of Kew, sends through Mr. G. Nicholson a form gathered on the chalk downs near Epsom in which the sepals are regularly no longer than the petals, both being about an inch long.

*Malva borealis*, Wallm. (*M. Henningii*, Goldb.) This species is now becoming one of the common mallows of the neighbourhood of London. From what we in England call *M. rotundifolia* of Linnæus, which is the *M. vulgaris* of Fries and many other continental authors, it differs by its much smaller flowers and fruit-carpels marked on the back by distinct transverse ridges. It comes much nearer to the common South European *M. parviflora* of Linnæus, but in this latter the calyx is more markedly accrescent in the fruiting stage, and the dorsal ridges of the fruit-carpels are more strongly pronounced and produced into marginal teeth. I have not seen any British specimens of the true *parviflora*. This year Mr. Nicholson has contributed specimens of three varieties of *borealis*, all gathered in the neighbourhood of Kew, with characters as follows:—

1. The type, as issued by Fries in his 'Herbarium Normale' under the name of *M. rotundifolia*, and figured by Reichenbach under the same name in his 'Icones,' tab. 4835, with slightly hairy fruit, a quarter of an inch in diameter, and a relatively small calyx with sepals hardly at all incurved at the tip.

2. A form, a smaller fruit (one-sixth to one-fifth of an inch in diameter) not particularly hairy, with a calyx as large as in the type, which wraps over it so as nearly to hide it. This is probably *M. microcarpa*, Reich. Ic., tab. 4833, but not the plant so called by Desfontaines, which is a *parviflora* form.

3. A form with densely hispid fruit as large as in the type, but with the sepals incurved and wrapped over it as in the second variety.

*Scleranthus biennis*. Sandy pastures at Milverton, Warwick.—  
H. BROMWICH.

*Lavatera sylvestris*. A good supply of Scilly specimens this year from Mr. Ralfs and others.

*Geranium striatum*. Shady hedge-bank at Penzance, W. B. WATERFALL; and the Cumberland side of Ulleswater Lake, Rev. A. WOOD, gathered by W. HODGSON.

*G. Robertianum*. Small-flowered forms with more or less fleshy leaves this year, from the east side of Vazon Bay, Guernsey, Dr. FRASER; shingly beach at Pett, E. Sussex, J. H. JENNER; sea-beach west of St. Leonard's, Sussex, C. BAILEY; rocky ground near Torquay, Mrs. LOMAX; and Stokes Bay, Hants, H. & J. GROVES.

*Trifolium supinum* and *spumosum*. Waste ground on the Surrey side of the Thames, near Kew.—G. NICHOLSON.

*Potentilla norvegica*. A good supply sent by Dr. Arnold Lees with the following note:—"This occurs in two West Yorkshire localities, some twelve miles apart, in both of which it has been known for over a dozen years. It continues to spread along certain lines of waterway. Along the banks of the canal, and River Aire, from Lake Loch Stanley towards Castleford, in the vice-county of S. W. York, it is found for miles; and also grows in profusion in the stonework of the canal between Armley Mills and Kirkstall in the vice-county of Mid-west York. It was first recorded in print in 1866 ('Naturalist,' O.S., vol. ii., p. 80), by the



late T. W. Gissing—a Wakefield botanist—under the name of *Aremonia agrimonoides*, as ‘pretty abundant by the canal running from Stanley to the Calder.’ Now, in 1878, this humble alien weed offers an example of perfectly successful colonisation only paralleled by *Anacharis* or *Impatiens fulva*. It was probably originally introduced with baulks or props of Norway pine used about the canal locks or in adjoining coal-pits, but it has now become as ineradicable as the indigenous weeds to be found with it by the towing-paths where it occurs, and in future editions of our descriptive manuals deserves a place much more than many other species of less recent introduction. It is a most prolific seeder, and the seeds germinate wherever they fall, apparently whether fully ripened on the parent plant or not.”

*Rosa incoluta*. A variety with naked peduncles and calyx-tube, nearly simple leaf-serration and leaves hairy only on the ribs beneath, from Apes Tor, Alstonfield, Stafford, Rev. W. H. PURCHAS.

*R. sepium*. One of the most valuable contributions this year is a good supply of this species from a hedge near Puttenham, in Surrey, from Messrs. H. & J. Groves. This for the first time settles it down firmly as an English plant. I got it near Hind Head many years ago, but saw only a couple of bushes. So far as I know it has never been seen in Warwickshire since Mr. Bree gathered it a generation ago.

*R. aspernata*, Desegl. Trusham, Rev. WM. ROGERS; Woodlands, near St. Budeaux, S. Devon, T. R. A. BRIGGS.

*R. latebrosa*, Desegl. Solihull, Warwick, J. BAGNALL; and Tamerton Folliott, S. Devon, T. R. A. BRIGGS. This and the last came under *R. verticillacantha*, as understood in my monograph.

*R. Borreri*. Tettenhall, Warwick, Dr. FRASER.

*R. tomentella*. Gayton and Rothershope, Northamptonshire, G. C. DRUCE.

*R. obtusifolia*. Barnes Common, Surrey, G. NICHOLSON; Chudley, S. Devon, Rev. WM. ROGERS; and Sellack and King’s Capel, Hereford, Rev. A. LEY.

*R. coriifolia*. Glen Lochay, Perth, Rev. E. F. LINTON; and High Ridge Fall, Roxburghshire, A. BROTHERSTON.

*R. Watsoni*. Edenmouth, Roxburghshire, A. BROTHERSTON. Peduncles sometimes setose.

*R. implexa*. Hedge near Shepperton, Surrey, H. & J. GROVES.

*R. surculosa*. Ham Common, Surrey, G. NICHOLSON. A form with globose fruit, like luxuriant *spherica*.

*R. biserrata*. Trusham, S. Devon, Rev. WM. ROGERS.

*R. Bakeri*. Hedge near Old Park, Warwick, H. BROMWICH; and Holgate, York, G. WEBSTER.

*R. arvensis*, var. *pubescens*, Desv. Ham Common, Surrey, G. NICHOLSON.

*Rubus mucronulatus*. Mr. G. Nicholson sends, from the neighbourhood of Kew, specimens of a London bramble which is regarded by Babington as a variety of *mucronulatus*, a stronger-growing plant than the type, with many setæ on the barren stem,

end-leaflets round (not obovate) with a decided cusp, panicle with more numerous and stronger prickles, and denser, more numerous flowers with shorter pedicels. I know of no special name for this, but it is a well-marked form that comes in between *mucronulatus*, *villicaulis*, and *fuscoater*. The true *mucronulatus*, which Dr. Boswell sends this year from the neighbourhood of Aberdour, in Fife, we do not get anywhere in the neighbourhood of London.

*R. villicaulis*. Mr. Bagnall sends a plant from New Park, Middleton, Warwickshire, which Bloxam named *R. heteroclitus*, Wirtgen. This seems to me a slight variety of *R. villicaulis*, and another plant from Mr. Bagnall from the same locality named *adscitus* by Bloxam to be typical *villicaulis*, as we understand it in England.

*R. ramosus*, Blox. Minworth, Warwick, J. BAGNALL; and Bircham, Egg Buckland, South Devon, T. R. A. BRIGGS. This seems to me a well-marked bramble, allied to *rhamnifolius*. I have never met with it about London, or in the north of England.

*R. Hystrix*. Wormley Wood, Broxbourne, Herts, Dr. CRESPIGNY.

*R. pyramidalis*. Easton Bishop, Hereford, Rev. A. LEY.

*R. diversifolius*, Lindl. A form with ascending sepals from hedges at Heslington, near York, G. WEBSTER.

*R. corylifolius* var. *R. degener*, Muller. Under this name, for which I am indebted to Genevier, I have distributed a few specimens, from hedges at Kew, of a bramble that comes in between *Balfourianus* and *corylifolius* var. *intermedius*. It has angular barren stems, copious large prickles on the rachis of its panicle, and ascending fruit-sepals.

*Lythrum hyssopifolium*. This I gathered last year in small quantity on the Surrey side of the Thames above Kew Bridge.

*Helosciadium nodiflorum* var. *ochreatum*, DC. (*Sium hybridum*, Merat.) Barnes Common, Surrey, G. NICHOLSON. This is a dwarf form of *nodiflorum* with small obtuse leaflets, one to three lanceolate bracts, and flower-umbels on peduncles one-quarter to one-half of an inch long. From *H. repens*, which is very rare in Britain, with which it is sometimes confounded, it differs by its assurgent flowering stems and shorter peduncles.

*Sedum Forsterianum*. Limestone rocks, Downton, Hereford, Rev. A. LEY.

*Valerianella eriocarpa*. A good supply from the neighbourhood of Penzance from MESSRS. CUNNACK and WATERFALL.

*Galium Bakeri*. Myton Wood, near Leamington, Warwick, H. BROMWICH.

*Carduus setosus*. Borders of fields near Finchley Road Station, Middlesex, Dr. CRESPIGNY.

*C. pycnocephalus*, L. Limestone cliff under the Hoe, Plymouth, South Devon, T. R. A. BRIGGS. This is what I understand as the true *pycnocephalus*, as defined by those authors (such as Grenier and Godron), who separate it as a species from our common English *C. tenuiflorus*, Curt.

*Hieracium "rigidum."* From the river-banks, Bishop Auckland, Durham, J. P. SOUTTER. I should call *crocatum* and his "*H. gothicum*" from the same station *tridentatum*, of which latter Mr.

Nicholson has contributed a good supply this year from Hampstead Heath.

*Specularia hybrida*. Stackyard at West Newton, Cheviotland. A. BROTHERSTON. New to Northumberland.

*Teucrium Botrys*. A supply sent again this year by Mr. Beeby from the Sanderstead station.

*Mentha pubescens*. Pengersick Castle, J. CUNNACK; and stream on Pra Sands, near Helston, Cornwall, J. RALFS. This is the first time we have had a supply of this interesting mint, which was gathered a generation ago in the neighbourhood of Penzance by Mr. Borrer, but has been long sought for in vain by the resident botanists.

*Acanthus mollis*. Thoroughly established on a hedge-bank at Treath Manaccan, Cornwall, growing with *Allium Ampeloprasum*, W. B. WATERFALL.

*Orobanche elatior*. It seems quite clear now that the Epsom *Orobanche*, which has been called *luorum*, is only *elatior* pure and simple. Mr. A. Bennett sends it this year from "fields between the town and downs, proceeding from the back of the grand stand towards the town of Epsom."

*Solanum nigrum*. A form with the fruit bright green when ripe (*S. luteo-virescens* of Gmelin), from rubbish-heaps at Mortlake, Surrey, G. NICHOLSON.

*Veronica Barbaunii*. A variety with very hairy stems, flowers smaller than usual, and fruit-carpels not ribbed till the plant is dried, from waste ground at Kew, G. NICHOLSON.

*Symphytum asperinum*. The introduced British plant which has been so called by Babington in 'Flora Bathoniensis,' and Dr. Boswell in 'English Botany,' of which Mr. Flower sends us a good supply this year from the long-known station in the neighbourhood of Bath, and Rev. W. H. Purchas from Grange Mill, near Wirksworth, Derbyshire, is evidently not the true wild *S. asperinum*, M. B., of the Caucasus, but a garden hybrid between that species and *S. officinale*, which is often planted for forage, and which is most likely *S. peregrinum*, Ledeb., Fl. Ross., vol. iii., p. 114. *S. asperinum* is a plant that grows five or six feet high, with stems densely clothed with very short, rigid, bristly pubescence, many of the bristles springing from white calcareous tubercles, leaves rough over the face with bristle-pointed white tubercles, like *Anchusa italica*, lower leaves of the flowering branches ovate and contracted suddenly at the base, and a flower-calyx not more than one-eighth of an inch long, with linear-oblong obtuse teeth not longer than the tube. The naturalised hybrid has much less bristly stems, leaves without white tubercles on the face, lower leaves of the flowering branches both absolutely narrower and narrowed more gradually at the base, and a flower-calyx like that of *officinale*, with acute linear teeth twice as long as the tube. Mr. Flower tells me that the Bath plant grows sometimes to the height of a man, so that it is not inferior to the true *asperinum* in stature, although in its leaves and flowers it seems much nearer to *officinale*. We have the true *asperinum* in the Kew herbarium from the neighbourhood of Stirling, gathered by G. Thomson.



*S. orientale*, L. Roadside at How Capel, Hereford, where it has been established for several years, Rev. A. LEY.

*Lysimachia ciliata*. In sending a supply of this from the old station at Sebergham, in Cumberland, Rev. R. Wood writes:—"I have known it there for at least sixty-five years. There is still a considerable patch."

*Plantago Timbali*, Jord. Hay-field at Kelso, Roxburghshire, A. BROTHERSTON; and forage-field at Penzance (coll. W. Curnow). J. RALFS.

*Amaranthus retroflexus*. Waste ground at Richmond, Surrey, G. NICHOLSON.

*Chenopodium opulifolium*. Mud-heaps at Mortlake, Surrey, G. NICHOLSON.

*Urtica pilulifera*. The lower branches of several vigorous plants growing on rubbish-heaps at Kew had the deeply serrated leaves of typical *pilulifera*, whilst the upper part of the plant showed the entire or subentire leaves of var. *Dodartii*, G. NICHOLSON.

*Polygonum alpestre*, C. A. Meyer. On the Surrey side of the Thames, near Kew Bridge, where it was first gathered by Mr. Naylor in 1872, G. NICHOLSON. It is identical with *P. cognatum*, Meisn., and is common through Western Asia.

*Rumex*. Dr. Trimen has kindly examined the critical forms of *Rumex* received this year, and reports on them as follows:—"An interesting series of specimens is sent by Rev. Augustin Ley from the banks of the tidal river Wye at Tintern, collected at the end of July, 1878. This Dock-vegetation in Monmouthshire is apparently much the same as that of the tidal Thames.

"*Rumex*, form of *conglomeratus*, Murr." This is a rather slender form with ascending branches, but scarcely var. *Borreri*.

"*Rumex*, hybrid. Tidal banks, Tintern." These are various forms of *R. pratensis* (*crispus* × *obtusifolius*).

"*Rumex elongatus*, Gussone? Muddy tidal banks, Tintern, 30th July, 1878." A fine series of large specimens of this; quite the same as the Thames plant. Whatever may be its proper name, it cannot be separated as a species from *R. crispus*. In some of Mr. Ley's specimens the petals are denticulate, as in *R. crispus*, and one has the lower leaves slightly crisped. There is a suggestion of *R. Hydrolapathum* about this river-side Dock, but I do not think it is a hybrid between that species and *R. crispus*.

"*Rumex* hybrid, *pulcher* × *obtusifolius*. Waste ground, West Head, East Cornwall, near the sea, 12th July, 1878." Portions of a large plant. I agree in the naming, but have not seen English specimens of this intermediate before. *R. obtusifolius* predominates.

"*Rumex* hybrids. Waste ground by the sea, West Head," and "Hedgerow near Millbrook, East Cornwall, 12th July." These are *R. pratensis* more or less typical. "Field near Cawsand, E. Cornwall." The same; a curious form, close to *R. crispus*, and with the tubercles almost entirely suppressed.

There are now on record a number of intermediate and probably

hybrid forms of *Rumex* in England. The species which seem most prone to cross are *R. pulcher*, *R. crispus*, and *R. conglomeratus*. I have seen English specimens of apparently the following hybrids:—

<i>Rumex pulcher</i>	× <i>rupestris</i> .
”	× <i>obtusifolius</i> .
”	× <i>conglomeratus</i> .
”	× <i>nemorosus</i> ?
”	× <i>crispus</i> .
” <i>crispus</i>	× <i>obtusifolius</i> ( <i>R. pratensis</i> , M. & K.)
”	× <i>nemorosus</i> .
”	× <i>domesticus</i> ( <i>R. conspersus</i> , Hartm.)
” <i>conglomeratus</i>	× <i>maritimus</i> (Warrenii).
”	× <i>sylvestris</i> .

Of these *R. pratensis* (*crispo-obtusifolius*) is by far the most common. This is an exceedingly variable plant, showing a series of forms completely connecting its two supposed parents. Probably the plants are often again crossed by either *crispus* or *obtusifolius*, and secondary hybrids result; it is convenient for further distinguishing these forms to call them *crispo-pratensis* or *obtusifolio-pratensis*.—H. TRIMEN, 28th February, 1879.

*Rumex maximus*. A supply this year from ditch-sides at Lewes, Sussex, J. H. JENNER; Kelvedon, Essex, E. G. VARENNE; and St. Mary's, Scilly (coll. W. Curnow), J. RALFS.

*Wulfia arhiza*. A good supply this year from a new station, a pond near the canal between Hanwell and Brentford, Middlesex, G. NICHOLSON.

*Potamogeton Zizii*, C. & S. A plant sent by Mr. Brotherston from Cauldshiels Loch, near Melrose, Roxburghshire, matches German specimens so labelled in the Kew herbarium by Dr. A. Braun. *P. Zizii* appears to be a large deep-water form of *heterophyllus*, simulating *P. lucens* in general habit, and destitute of floating leaves. The same plant is in Borrer's herbarium from Llyn Maclog, in Anglesea, gathered by Wilson.

*Zannichellia polycarpa*. Brackish ditch in the Peoples' Park at Belfast, S. A. STEWART. An interesting addition to the Irish flora.

*Zostera angustifolia*. Dr. Trimen points out that a plant gathered by Mr. Waterfall at Plymouth, and labelled *Z. nana*, is properly *angustifolia*, and that the true *nana*, of which Mr. Ralfs has sent a good supply from Cornwall, may be readily distinguished in the absence of flowers by its strictly 1-nerved leaves.

*Naias flexilis*. A supply sent this year by Mr. Stewart and Dr. Boswell from the Scotch station.

*Allium carinatum*. Sandy banks of the Esk, above Musselburgh, in large quantity, A. CRAIG-CHRISTIE.

“*Iris Pseudo-Acorus*, Boreau, Flore du Centre de la France. (*I. Pseudacorus*, Linn., var. *genuina*, Syme Eng. Bot.) Banks of Thames, Kew, Surrey, and fish-pond, Sion House, Isleworth, Middlesex. This is a very distinct *Iris*, and easily distinguished from the prevailing form (*I. acoriformis*, Boreau,

with which it is probably frequently confounded) by the following characters:—*I. Pseudacorus*, Boreau. Outer perianth-segments of a uniform clear yellow colour; blade broadly obovate; claw rather short; stigmas long and narrow.—*I. acoriformis*, Boreau. Blade of outer perianth segments nearly orbicular, a deeper blotch at base; claw long, greenish yellow marked with prominent violet-purple veins; stigma shorter and broader than in last-named, and the yellow of the flower almost a shade less deep.”—G. NICHOLSON.

*Carex muricata* var. *pseudo-divulsa*. Name authenticated by Dr. Boswell. “(Root from Lander, Berwickshire), June, 1878. I brought the plant several years ago from a wood near Lander, and planted it alongside a plant of the common *C. muricata* of the district. At all times they look very different, this being much the strongest grower, and also a good deal earlier in flowering than *muricata*.”—A. BROTHERSTON. Mr. Charles Bailey sends the same plant from a lane at Pepplesham, near St. Leonard’s, Sussex.

*C. punctata*. Dr. Trimen points out that a plant so labelled, gathered by Mr. Stewart on rocky shore at Dingle, Kerry, is properly a small form of *distaus*.

*Panicum Crus-galli*. Tweed-side, Roxburghshire, abundant in 1878; introduced with foreign wool.—A. BROTHERSTON.

*Leersia oryzoides*. Ditch on Shalford Common, near Godalming, Surrey, A. BENNETT. A new station.

*Bromus Benckenii*. “Garden grown; root from Eaton Bishop, Herefordshire, July, 1878, A. LEY. This appears to be correctly referred to *B. Benckenii*, Lange, differing from that plant mainly in its greater luxuriance and more ample panicle, the result probably of garden cultivation. Specimens of the original wild plant, with notes on its locality and distribution, would be of great interest.”—H. TRIMEN.

*Ophioglossum vulgatum*, L.,  $\beta$  *ambiguum*, C. & G. “Pasture at the west end of the Calf of Flotta, Orkney, August 2, 1878. Discovered on the above date by Mr. Wm. A. Irvine Fortescue. I have seen two specimens of this plant from near the Black Crag, Stromness, where Miss Patricia Deuchar first found it in 1877. These two stations and Dr. Boswell’s one at Veness, and that at Swanbister, in Orphir, are all at the seashore.”—H. HALCRO JOHNSTON, December 31, 1878.

MR. CHARLES BAILEY having kindly undertaken the general management of a new Exchange Club, all subscriptions must for the future be paid to him, and parcels and other communications addressed to him, care of Messrs. Ralli Brothers, Peter Street, Manchester. I also take this opportunity of informing many of my correspondents that I am leaving 23, Gloucester Road, Kew, and that my only address will now be Royal Herbarium, Kew.

J. G. BAKER.

THE  
BOTANICAL EXCHANGE CLUB.

LIST OF DESIDERATA

FOR  
1878.

CLUB REGULATIONS AND LIST OF MEMBERS.

LONDON:

PRINTED BY T. P. NEWMAN, 32, BOTOLPH LANE,  
EASTCHEAP, E.C.

---

1878.





## REGULATIONS OF THE CLUB.

---

1. THE object of the Botanical Exchange Club is to facilitate the exchange of dried specimens of British plants, especially of critical species and varieties. Anyone wishing to become a member will be admitted on payment to the Secretary of an annual subscription of Five Shillings, and on sending a parcel of dried plants in accordance with the subsequent rules. He will then be entitled to share in the distribution of specimens made in the early part of the year following that in which his subscription and parcel were sent.

2. Specimens sent for distribution must be carefully dried; must not exceed in size half-a-sheet of demy (16 by 10 inches); and must illustrate the species they represent as completely as possible. Plants more than sixteen inches long should be once or twice folded, if by so doing the roots can be preserved. (In the *Cyperaceæ*, *Gramina*, and smaller Ferns no specimens should be sent without roots, except in the case of very rare species, which might be in danger of extermination.) No plant must be sent that is not included in the List of Desiderata for the current year, unless it be additional to those enumerated in the 7th edition of the 'London Catalogue of British Plants,' or be from an unrecorded station, or be an unrecorded variety.

3. *Each specimen* must have a label, bearing the number and name of the species as given in the 7th edition of the 'London Catalogue'; also the locality and county where, and the date when, the specimen was collected, and the collector's name. The label should be affixed to the specimen by cutting a transverse slit in the base of the label through which the specimen may be pushed. Any facts connected with a species which the sender thinks important and suitable for the 'Report' should be communicated on a separate piece of paper, *written on one side only*. Such piece of paper should be about seven inches wide, and the notes on each species should be dated and signed by the writer. Specimens sent not in accordance with Rules 2 and 3 will be destroyed.

4. Each parcel should be accompanied by a list of the plants the member wishes to receive from the Club. This list is to be made by drawing a short line before their names in the 7th edition of the 'London Catalogue.'\* Species especially wished for should have a ! before the horizontal line. The name of the member and address to which the return parcel is to be sent, and any special directions as to how the parcel is to be sent, should be written on the outside of the 'Catalogue.' When the same copy of the 'Catalogue' is used a second time the species which are no longer wanted, but which were marked the first time, should have a perpendicular line drawn through the horizontal line. Manuscript lists of desiderata will not be received.

5. Parcels may be sent (*carriage paid*) to any of the following gentlemen not later than the 31st of December:—Dr. BOSWELL, Balmuto, Kirkealdy, Fife; Mr. T. R. A. BRIGGS, Richmond Villa, Saltash Road, Plymouth; Mr. J. G. BAKER, Kew Herbarium; and Mr. CHARLES BAILEY, care of Ralli Brothers, Peter Street, Manchester. Those that arrive after that date will not be available for the distribution for the current year. Members sending more valuable parcels will have their return parcels selected before those who send inferior ones.

6. Members who do not send parcels, but who have been members of the Botanical Exchange Club previous to 1872, and paid their subscription for the current year before December 31st, will share in the annual distribution; but the specimens for such non-contributing members will not be selected until the parcels of all the contributing members have been made up, and they cannot be selected according to lists of desiderata; but *general* instructions, such as the desire to receive plants of particular districts, natural orders, or genera, will be attended to by the distributor. In future no new members will be received by the Botanical Exchange Club except those who contribute specimens of plants.

\* Published by Mr. R. Hardwicke, 192, Piccadilly, London, W. (Price 6d., post free 7d.)

## LIST OF MEMBERS, 1878.

### Curator.

REGINALD A. PRYOR,  
Baldock, Herts.

### Secretary.

J. G. BAKER, F.L.S.,  
Kew Herbarium, and 23, Gloucester Road, Kew.

### Local Secretaries.

JOHN T. I. B. BOSWELL, LL.D., F.L.S.,  
Balmuto, Kirkcaldy, N.B.

CHARLES BAILEY,  
85, Withington Road, Whalley Range, Manchester.

T. R. ARCHER BRIGGS, F.L.S.,  
Richmond Villa, Saltash Road, Plymouth.

---

Alcock, H. R.	-	-	-	-	Hudcar House, Bury, Lancashire.
Babington, C. C., M.A., F.R.S., F.L.S., F.G.S., Prof. of Botany, University of Cambridge	-	-	-	-	5, Brookside, Cambridge.
Bagnall, James	-	-	-	-	81, Witton Road, Aston, Bir- mingham.
Bailey, Charles	-	-	-	-	85, Withington Road, Whalley Range, Manchester.
Baillie, E. J.	-	-	-	-	7, Crane Street, Chester.
Baker, J. G., F.L.S.	-	-	-	-	Kew Herbarium.
Baker, R. L., M.D.	-	-	-	-	Barham House, Leamington.
Beeby, W. H.	-	-	-	-	2, Outram Villas, Addiscombe, Croydon.

Bennett, A.	-	-	-	-	107, Mount St., Croydon, Surrey.
Bennett, Alfred W., M.A., B.Sc., F.L.S.	-	-	-	-	6, Park Village East, Regent's Park, London, N.W.
Benson, Mrs.	-	-	-	-	Ringwould Rectory, Dover.
Blow, T. B.	-	-	-	-	Welwyn, Herts.
Boswell, John T. I. B., LL.D., F.L.S.	-	-	-	-	Balmuto, Kirkcaldy, N.B.
Briggs, T. R. Archer, F.L.S.	-	-	-	-	Richmond Villa, Saltash Road, Plymouth.
Brody, Dr. St.	-	-	-	-	Rose Cottage, Queen's Road, Rich- mond, Yorkshire.
Brotherston, Andrew	-	-	-	-	Shedden Park Road, Kelso, N.B.
Brown, R.	-	-	-	-	5, Poplar Grove, The Elms, Toxteth Park, Liverpool.
Crespigny, Eyre de, M.D.	-	-	-	-	25, Oxford Road, Kilburn, London, N.W.
Cunnaek, James	-	-	-	-	Helston, Cornwall.
Douglas, D.	-	-	-	-	87, Bonnington Road, Leith, N.B.
Drummond, Tom	-	-	-	-	Freefield, Clackmanman, Alloa, N.B.
Drummond-Hay, Col. H. M.	-	-	-	-	Seggieden, Perth, N.B.
Duthie, J. F., B.A., F.L.S.	-	-	-	-	Saharunpore Botanic Garden.
Foggitt, T. J.	-	-	-	-	Sowerby, Thirsk, Yorkshire.
Fisher, H. S.	-	-	-	-	Parish Office, Brownlow Hill, Liverpool.
Flower, T. B., F.L.S.	-	-	-	-	9, Beaufort Buildings West, Bath.
Fox, Rev. H. E., M.A.	-	-	-	-	70, Warwick Square, Pimlico, London, S.W.
Fraser, J., M.D.	-	-	-	-	Chapel Ash, Wolverhampton.
Groves, J.	-	-	-	-	13, Richmond Terrace, Clapham Road, S.W.
Hanbury, F. J., F.L.S.	-	-	-	-	11, Warwick Road, Upper Clap- ton, E.
Hayward, W. R.	-	-	-	-	53, St. Paul's Churchyard, London, E.C.
Hobkirk, C. P., F.L.S.	-	-	-	-	Arthur Street, Fitzwilliam Street, Huddersfield.
Horn, G.	-	-	-	-	57, Bell Street, Calton, Glasgow.
Howarth, Miss	-	-	-	-	Spring Bank, Burnley, Lancashire.

Hutmacher, E.	-	-	-	12, Coal Market, Kelso, N.B.
Jenner, J. H. A.	-	-	-	4, East Street, Lewes, Sussex.
Lees, F. Arnold, M.R.C.S., F.L.S.				Market Rason, Lincoln.
Lewis, J. Harbord, F.L.S.	-	-	-	145, Windsor Street, Liverpool, S.
Ley, Rev. Augustin, M.A.	-	-	-	Sellack Vicarage, Ross, Hereford.
Linton, Rev. E. F., M.A.	-	-	-	St. George's Rectory, Oldham Road, Manchester.
Linton, Rev. W. R., M.A.	-	-	-	180, Upper Street, Islington, London, N.
Lomax, Mrs. E.	-	-	-	Astwell, Torquay.
Macartney, H. E.	-	-	-	Clogher Park, Co. Tyrone, Ireland.
Mason, P. B.	-	-	-	Burton-on-Trent.
Melvill, J. C., Jr., B.A., F.L.S.	-			Kersal Cottage, Prestwich, near Manchester.
Middleton, R. M.	-	-	-	Fountain Ho., West Hartlepool.
More, A. G., F.L.S., M.R.I.A.	-			Royal Dublin Society, Kildare Street, Dublin.
Moiser, H. R., F.G.S.	-	-	-	2, South View, Heworth, near York.
Mott, F. T.	-	-	-	Birstal Hill, Leicester.
Newbould, Rev. W. W., M.A., F.L.S.				118, Albany Street, Regent's Park, London, N.W.
Nicholson, G.	-	-	-	Kew Gardens, Surrey.‡
Payne, Miss	-	-	-	2, Westerhall Villas, Weymouth.
Penny, Rev. C. W., M.A., F.L.S.	-			Wellington College, Wokenham, Berks.
Purchas, Rev. W. H.	-	-	-	Alstonfield Vicarage, Ashbourne, Stafford.
Ralfs, John	-	-	-	Penzance, Cornwall.
Richardson, W.	-	-	-	Finkle Street, Alnwick.
Rogers, Rev. W. Moyle	-	-	-	Trusham Rectory, Bovey Tracey.
Shrivell, F. W. E.	-	-	-	Hadlow, Kent.
Soutter, J. P.	-	-	-	1, Clyde Terrace, Bishop Auckland, Durham.
Stewart, S. A.	-	-	-	6, North Street, Belfast.
Stratton, Fred., F.L.S.	-	-	-	Newport, Isle of Wight.
Townsend, F., M.A.	-	-	-	Honington Hall, Shipston-on-Stour.



Trimen, H., M.B., F.L.S.	-	-	British Museum, London, W.C.
Tucker, R., M.A.	-	-	27, Cantlowes Road, Camden Square, N.W.
Varenne, E. G.	-	-	Kelvedon, Essex.
Warner, F. I., F.L.S.	-	-	20, Hyde Street, Winchester.
Warren, Hon. J. L., M.A.	-	-	67, Onslow Square, Brompton, London, S.W.
Waterfall, W. B.	-	-	14, Sea View Terrace, Plymouth.
Webb, F. M.	-	-	Royal Botanic Gardens, Edinburgh.
Webster, G.	-	-	Holgate, York.
Whittaker, J.	-	-	Morley, Derby.
White, C. F., F.L.S.	-	-	42, Windsor Road, Ealing.

## LIST OF DESIDERATA FOR 1878.

*N.B.—Of any of the species in the following List, specimens varying in number from 10 to 50, according to its degree of rarity, will be acceptable.*

<p>Thalictrum majus, var. a                      Kochii                      saxatile                      riparium                      Morisonii                      nigricans                      angustifolium</p> <p>Anemone apennina                      ranunculoides</p> <p>Ranunculus Bachii                      elongatus                      radians                      marinus                      salsuginosus                      tripartitus                      ophioglossifolius                      reptans                      vulgatus                      tomophyllus                      parvulus                      chærophyllus</p> <p>Caltha minor                      radicans</p> <p>Delphinium Ajacis                      Consolida</p> <p>Aconitum Napellus              Pæonia corallina              Epimedium alpinum              Nuphar intermedia                      pumila</p> <p>Papaver strigosum              Glaucium violaceum                      phœniceum</p> <p>Chelidonium laciniatum (<i>sponte</i>)              Fumaria Boræi                      muralis</p>	<p>Sinapis incana              Brassica Napus                      sylvestris</p> <p>Sisymbrium Irio              Matthiola incana</p> <p><del>Arabis stricta</del>                      ciliata                      hispida                      Turrita</p> <p>Barbarea arcuata                      intermedia</p> <p>Nasturtium siifolium              Armoracia rusticana (fruit)              Cochlearia (any abnormal                      forms)</p> <p>Draba inflata              Camelina sativa                      sylvestris</p> <p>Subularia aquatica              Helianthemum Brewerii                      vineale                      grandiflorum</p> <p><del>Viola sepincola</del>                      calcareæ                      arenaria                      intermedia                      stagnina                      Curtisii, vars. a, b, and c</p> <p>Drosera obovata              Polygala grandiflora                      oxyptera                      austriaca                      uliginosa</p> <p>Dianthus glaucus                      Caryophyllus</p> <p>Lychnis alpina (England)</p>
--	---

- Holosteum umbellatum  
 Cerastium holosteoides  
     pentandrum  
     alpestre  
     serpentini  
     pubescens  
     nigrescens  
     Andrewsii  
     trigynum  
 Arenaria Lloydii  
     norvegica  
     ciliata  
 Alsine hybrida  
     uliginosa  
 Sagina alpina  
     nivalis  
 Spergularia media  
~~to~~ Herniaria glabra  
 Scleranthus biennis  
 Elatine Hypropiper (fruit)  
 Hypericum angustifolium  
     linarifolium  
     hircinum (*sub-sponte*)  
     elatum (*sub-sponte*)  
 Althæa hirsuta  
 Lavatera sylvestris  
 Malva borealis  
     parviflora, *L.*  
 Geranium prostratum  
     lancastriense (*sponte*)  
     modestum  
     purpureum  
 Erodium chærophyllum  
 Ononis repens  
     reclinata  
 Medicago sylvestris  
     apiculata  
     lappacea  
 Trifolium sylvestre  
     Townsendi  
     filiforme (Scotland)  
 Lotus angustissimus  
 Oxytropis Halleri  
     campestris  
 Astragalus alpinus  
 Vicia bithynica, var. *b.*  
     Orobus (fruit)  
 Lathyrus tuberosus  
     palustris (fruit)  
     acutifolius  
     sphæricus  
 Orobus niger  
 Alchemilla conjuncta (*sponte*)  
 Potentilla norvegica  
 Sibbaldia procumbens  
 Fragaria elatior (*sub-sponte*)  
 Rubus Leesii
- Rubus suberectus  
     plicatus  
     affinis  
     lentiginosus  
     incurvatus  
     imbricatus  
     ramosus  
     latifolius  
     pubescens  
     thyrsoideus  
     Grabowskii  
     Colemanni  
     Salteri  
     calvatus  
     carpinifolius  
     villicaulis  
     derasus  
     adscitus, *Genev.*  
     macrophyllus  
     Schlectendalii  
     amplificatus  
     glabratus  
     Borreri  
     Bloxamii  
     Hystrix  
     pygmæus  
     scaber  
     mutabilis  
     Leightoni  
     denticulatus  
     Kœhleri (verus)  
     infestus  
     pallidus  
     fusco-ater  
     Briggsii  
     Lejeunii  
     pyramidalis  
     humifusus  
     foliosus  
     Bellardi  
     hirtus  
     Balfourianus  
     conjugens  
     purpureus  
     althæifolius  
     tuberculatus  
     cæsius, vars., named  
     Chamæmorus (Wales)  
 Dryas depressa  
 Rosa rubella  
     Robertsoni  
     Smithii  
     lævigata  
     Moorei  
     occidentalis  
     cordifolia  
     Grovesii

Rosa pomifera	Myriophyllum pectinatum
cærulea	Callitriche verna (fruit)
suberecta	truncata
farinosa	autumnalis
sylvestris	Ribes sylvestre
obovata	Smithianum
permixta	spicatum
sylvicola	Sedum Fabaria
Briggsii	teretifolium
Hystrix	micranthum
sepium	dasyphyllum
Billietii	sexangulare
cryptopoda	albescens
pulverulenta	minus
surculosa	Forsterianum
sphærica	Saxifraga stellaris, var. vivipara
senticosa	Geum, vars. (Irish)
biserata	hirsuta
frondosa	umbrosa
pruinosa	cæspitosa
incana	Sternbergii
tomentella	decipiens
obtusifolia	sponhemica
latebrosa	Eryngium campestre (Kent)
aspernata	Cicuta virosa
collina	Helosciadium repens
concinna	Moorei
decipiens	Ligusticum scoticum
Hailstoni	Bupleurum aristatum
implexa	Oenanthe silaifolia (root-leaves)
coriifolia	Siler trilobum
Watsoni	Meum Athamanticum
celerata	Peucedanum palustre
Borreri	Tordylium maximum
Bakeri	Caucalis latifolia
systyla	Chærophyllum sativum
leucochroa	Coriandrum sativum
Desvauxii	Cornus suecica
opaca	Lonicera Caprifolium
Monsoniæ	Linnæa borealis
bibracteata	Galium erectum
austriaca	Mollugo, vars. b and c
Cotoneaster vulgaris	nitidulum
Mespilus germanica	elongatum
Pyrus scandica	anglicum
semipinnata	Vaillantii
fennica	Asperula arvensis
Pyraster	taurina
Achras	Valeriana pyrenaica
Briggsii	Valerianella carinata (new stations)
Lythrum Hyssopifolia	eriocarpa and b. glabra
Epilobium anagallidifolium	Onopordum Acanthium
Enothera biennis	Carduus pycnocephalus, Jacq.
odorata	polyanthemos
Isnardia palustris	litigosus
Circæa intermedia (lutetiana)	tuberosus
intermedia (alpina)	setosus

- Carduus hybrida (any)  
 — Arctium eu-minus  
     intermedium  
     nemorosum  
 Saussurea alpina  
 Centaurea paniculata  
 Matricaria inodora, vars. b and c.  
 Anthemis anglica  
 Diotis maritima  
 Artemisia campestris  
     gallica  
 Filago apiculata  
 Gnaphalium pilulare  
     luteo-album  
     norvegicum  
     hyperboreum  
 Senecio vulgaris, var. hibernica  
     paludosus  
     palustris  
     maritima  
 Bidens radiata  
     hybrida  
 Inula salicina  
 Aster salignus  
 Solidago angustifolia  
 Arnoseris pusilla  
 Hypochæris Balbisii  
 Pieris arvalis  
 Leontodon pratensis  
 — Tragopogon grandiflorus  
 Taraxicum lævigatum  
 Lactuca Scariola  
 Mulgædium alpinum  
 Sonchus glabra  
     palustris  
 Crepis setosa  
     succisifolia  
     nicæensis  
 Hieracium. (Any named by com-  
     petent authority, except—  
     Pilosella  
     aurantiacum  
     murorum  
     vulgatum (type)  
     maculatum  
     umbellatum  
     boreale  
 Campanula persicifolia (*sub-sponte*)  
     Rapunculus  
 Vaccinium uliginosum  
 Arctostaphylos alpina  
 Arbutus Unedo (*sponte*)  
 Loiseleuria procumbens  
 Menziesia cærulea  
 Erica hibernica  
 Pyrola rotundifolia  
     secunda  
 Pyrola uniflora  
 Monotropa hirsuta  
 Erythæra latifolia  
 Cicendia pusilla  
 Gentiana verna  
     nivalis  
 — germanica  
 Cuscuta hassiaca  
 Solanum miniatum  
 Verbascum pulverulentum  
     hybrida (any)  
 Linaria Pelisseriana  
     repens, var. b.  
     speciosa  
     purpurea (*sub-sponte*)  
     hybridæ (any)  
 Veronica verna  
     humifusa  
     spicata  
     hirsuta  
     tenella  
 Euphrasia officinalis, vars.  
 Bartsia rotundata  
     alpina  
 Rhinanthus major  
 Melampyrum cristatum  
     ericetorum  
 Orobanche arenaria  
     cærulea  
     caryophyllacea  
     elatior  
     Picridis  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~ ~~—~~  
 — ~~—~~ ~~—~~ ~~—~~ ~~—~~



- Stachys germanica  
 Galeopsis intermedium  
     ochroleuca  
     bifida  
 Lamium decipiens  
 Ajuga pyramidalis  
 Teucrium Botrys (Sanderstead)  
 Myosotis strigulosa  
     alpestris (England)  
     Mittenii  
 Anchlussa officinalis  
 Asperugo procumbens  
 Pinguicula grandiflora  
     alpina  
 Utricularia neglecta (flowers)  
     minor (flowers)  
     intermedia (flowers)  
     Bremii  
 Primula scotica  
 Cyclamen hederifolium  
 Lysimachia punctata  
     ciliata  
 Armeria duriuscula  
 Statice pyramidalis  
     Dodartii  
 Plantago Timbali  
     hirsuta  
     arenaria  
 Amaranthus Blitum  
 Salicornia procumbens  
     radicans  
 Chenopodium cymosum  
     urbicum  
     intermedium  
     botryoides  
     glaucum  
 Atriplex erecta (E. B., iii.)  
     prostrata  
     triangularis  
     pedunculata  
     rosea, *L.*  
 Rumex conglomeratus, forms of  
     rupestris  
     viridis, forms of  
     Warrenii  
     palustris  
     obtusifolius, forms of  
     conspersus  
     elongatus  
     aquaticus  
     maximus  
     alpinus  
     hybridi (any)  
 Polygonum agrestinum  
     microspermum  
     rurivagum  
     littorale  
 Polygonum maritimum  
     elatum  
 Hippophaë rhamnoides  
 Daphne Mezereum  
 Asarum europæum (*sponte*)  
 Euphorbia Peplis  
     hiberna  
     pseudo-Cyparissias  
     Cyparissias  
     coralloides  
     dulcis  
 Mercurialis ambigua  
 Ceratophyllum submersum  
 Parietaria fallax  
 Urtica pilulifera  
     Dodartii  
 Ulmus glabra  
     montana, vars. b and c  
 Quercus intermedia  
 Populus alba (female flowers)  
     canescens (female flowers)  
     tremula, var. b  
 Salix viridis  
     Russelliana  
     purpurea (male flowers)  
     Woolgariana  
     Lambertiana  
     Doniana  
     Forbyana (male flowers)  
     Helix  
     hippophaëfolia  
     stipularis  
     Smithiana  
     pseudo-stipularis  
     ferruginea (male flowers)  
     rugosa  
     acuminata  
     oleifolia  
     sphacelata  
     phylicifolia, vars. named  
     nigricans, vars. named, except  
         genuina and Damascena  
     ambigua and vars.  
     repens, vars. named  
     rosmarinifolia  
     angustifolia  
     Lapponum and vars.  
     Arbuscula and vars.  
     Myrsinites, vars.  
     Grahami  
     Bakeri  
     Moorei  
     Sadleri  
 Pinus sylvestris (*sponte*)  
     Pinaster  
 Taxus fastigiata  
 Typha media

- Typha angustifolia  
 Sparganium affine  
 Arum italicum  
 Potamogeton pseudo-fluitans  
     linearis  
     plantagineus  
     sparganiifolius  
     Lonchitis  
     lanceolatum (floating  
         leaves)  
     acuminatus  
     decipiens (flowers)  
     longifolius  
     prælongus  
     zosterifolius  
     acutifolius  
     mucronatus  
     trichoides  
     pectinatus (type)  
     filiformis  
     macrostemon  
 Zannichellia polycarpa (*Gay*)  
 Ruppia spiralis  
 Zostera nana  
 Naias flexilis  
 Zcheuchzeria palustris  
 Alisma lanceolatum  
     natans  
 Stratiotes aloides  
 Orchis hircina  
     purpurea  
     militaris  
     Simia  
     laxiflora  
     incarnata  
 Neotinea intacta  
 Ophrys arachnites  
 Spiranthes æstivalis  
     gemmipara  
 Epipactis ovalis  
     violacea  
 Cephalanthera rubra  
 Epipogon aphyllum  
 Corallorhiza innata  
 Liparis Loeselii  
 Cypripedium Calceolus  
 Sisyrrinchium Bermudiana  
 Gladiolus illyricus  
 Iris citrina  
     Pseudacoris, genuina  
     Bastardi  
     tuberosa  
 Crocus aureus  
     biflorus  
 Narcissus Bromfieldii  
     major  
     poeticus  
 Narcissus Tazetta (Cornwall)  
 Leucojum vernum  
 Polygonatum verticillatum  
     officinale  
     intermedium  
 Lloydia serotina  
 Ornithogalum pyrenaicum  
 Muscari racemosum  
     comosum  
 Allium Ampeloprasum, vars. a and b  
     Babingtonii  
     vineale, var. a  
     complanatum  
     Schænoprasum  
     carinatum  
     paradoxum  
 Simethis bicolor  
 Luzula Borreri  
     sudetica  
 Juncus filiformis (Scotland)  
     macrocephalus  
     Kochii  
 Scirpus uniglumis  
     parvulus  
     Holoschænus (root-leaves)  
     pungens  
 Eriophorum alpinum  
     gracile  
 Carex rupestris  
     incurva  
     paradoxa  
     pseudo-divulsa  
     Boenninghauseniana  
     lagopina  
     alpicola  
     bracteata  
     alpina  
     Buxbaumii  
     stricta  
     Watsoni  
     uliginosa  
     Gibsonii  
     Micheliana  
     stictocarpa  
     irrigua  
     ericetorum  
     tomentosa  
     vaginata  
     ustulata  
     frigida  
     punctata  
     speirostachya  
     sterilis  
     ebracteata  
     involuta  
     Grahami  
 Chamagrostis minima

Digitaria humifusa	Asplenium fontanum
Echinochloa Crus-galli	Athyrium molle
Hierochloa borealis	incisum
Anthoxanthum Puelii	Cystopteris dentata
Alopecurus pronus	Dickieana
Watsoni	alpina
Sesleria flavescens	montana
Agrostis interrupta	Aspidium Lonchitis
Calamagrostis Hookeri	lobatum
tenella	Nephrodium affine
Corynephorus canescens	abbreviatum
Aira cæspitosa, vars. b and c	pumilum
uliginosa	cristatum
montana	remotum
caryophyllea, vars. E. B. iii.	uliginosum
Avena strigosa	collinum
fatua, vars. b and c	nanum
Koeleria albescens	glandulosum
Poa stricta	Polypodium flexile
laxa	Gymnogramme leptophylla
glauca	Ophioglossum lusitanicum
Balfourii	Botrychium rutaceum
Parnellii	Lycopodium annotinum
Cynosurus echinatus	Isoetes echinospora
Festuca ovina, vars. b, c, and d	Hystrix
sylvatica	Equisetum pratense (fruct.)
arundinacea	alpestre
Bromus Benckeni	subnudum
rigidus	paleaceum
pubescens	variegatum
Lloydianus	arenarium
patulus	Wilsoni
Brachypodium glabrescens	trachyodon
Triticum biflorum	Chara flexilis
pungens	syncarpa
acutum	translucens
Lolium arvense	mucronata
linicola	gracilis
Trichomanes radicans	tenuissima
Andrewsii	glomerata
Adiantum Capillus-Veneris	intricata
Asplenium germanicum	aloppecuroides
anceps	crinita
microdon	hispida
acutum	tomentosa
serpentini	fragifera

Any of the "Excluded Species," in addition to those named in the above List, will be acceptable, except—

Petasites fragrans  
Linaria supina  
          purpurea

Veronica peregrina  
Poa sudetica  
Ceratochloa unioloidea





24ColorCard Camera Copy.Com<sup>TM</sup>

